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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. ~~74.~~ 70 3

SAMUEL F. CRAIG, APPELLANT,

vs.

JACOB SMITH AND GEORGE D. HALE.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF KANSAS.

FILED MAY 31, 1875.

SUPREME COURT OF THE UNITED STATES.

No. 74.

SAMUEL F. CRAIG, APPELLANT,

vs.

JACOB SMITH AND GEORGE D. HALE.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF KANSAS.

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a In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE, PARTNERS as Smith & Hale.

It is hereby agreed that the following papers were used on the hearing of this cause, to wit:

Certified files of the application of L. M. Rumsey and W. P. Smith, for improved drill, filed Nov. 16, 1868.

Certified files of application of W. P. Smith, filed for patent August 29, 1868.

Certified files of application of W. P. Smith, filed March 14, 1868.

Certified files of application of W. P. Smith, filed Feb'y 27, 1868.

Certified files of application of William P. Smith, filed Jan'y 25, 1868.

Certified files of application of H. G. Cody, filed Oct. 29, 1867.

Copy of resolution of Pump Manufacturers' Association of the United States.

Certified files of application of Charles Batcheller, filed March 21st, 1868.

Certified files of application of Charles Batcheller, filed Aug. 31, 1866.

Certified files of letters-patent of J. C. & M. V. Campbell, dated Jan'y 9, 1866.

Certified files of letters-patent granted John Chandler, dated Sept. 7, 1866.

b Letter of examiner in charge to W. P. Smith, in rejecting application, dated filed Jan'y 25, 1868.

Letters-patent of Timothy Rose, Sept. 11, 1866.

And the same are to be transmitted to the Supreme Court of the United States, under the order of the court.

C. M. FOSTER,
Sol. for Comp't.
GUTHRIE & BROWN,
Sol. for Defendants.

(Endorsed:) Filed Feb'y 25, 1874. A. S. Thomas, clerk.

c UNITED STATES OF AMERICA,
District of Kansas, ss:

I, A. S. Thomas, clerk of the circuit court of the United States of America for the district of Kansas, do hereby certify the foregoing to be a true, full, and perfect copy of an agreement filed in the case of Samuel F. Craig vs. Jacob Smith & George D. Hale, No. 477, in said court.

In testimony whereof I have hereunto set my hand and affixed the seal of said court, at my office in Topeka, in said district of Kansas, this 5th day of May, A. D. 1875.

A. S. THOMAS, *Clerk.*

d In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE, PARTNERS as Smith & Hale.

It is hereby agreed that certified copies from the U. S. Patent-Office

of the following patents may be used and supplied as soon as the same can be obtained, the same having been used on the hearing of this suit, to wit:

James Suggett's patent, dated March, 1866; James Suggett's patent, dated March, 1866; and the application of Hector Cowan, filed and rejected in 1867.

C. M. FOSTER,
Sol. for Comp't.
GUTHRIE & BROWN,
Sol. for Defendant.

(Endorsed:) Filed Feb'y 25, 1874. A. S. Thomas, clerk.

e UNITED STATES OF AMERICA,
District of Kansas, ss:

I, A. S. Thomas, clerk of the circuit court of the United States of America for the district of Kansas, do hereby certify the foregoing to be a true, full, and perfect copy of an agreement in the case of Samuel F. Craig vs. Jacob Smith & George D. Hale, No. 477, in said court.

In testimony whereof I have hereunto set my hand and affixed the seal of said court, at my office in Topeka, in said district of Kansas, this 5th day of May, A. D. 1875.

A. S. THOMAS, *Clerk.*

(Indorsed:) No. 477. S. F. Craig vs. Smith & Hale. Copy of agreement. Sup. Court U. S., 1875, Octo. term. No. 529. S. F. Craig vs. Smith & Hale. Copy of agreement. Filed 27th May, 1875.

1 In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE. } In equity.

DISTRICT OF KANSAS, *ss:*

Be it remembered that on the 2nd day of February, A. D. 1872, came the said complainant, by Martin Burns & Case and Alfred Ennis, his solicitors, and filed in the office of the clerk of the circuit court of the United States for the district of Kansas, at Topeka, in said district, his bill of complaint, which said bill of complaint, with the endorsements thereon, is in the words and figures following, to wit:

Bill.

UNITED STATES OF AMERICA:

In the circuit court of the United States in and for the district of Kansas. To the May term thereof, A. D. 1872.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE. } Bill in chancery for injunction.

To the Honorable Samuel F. Miller, John F. Dillon, & Mark W. Delahay, justices of the circuit court of the United States in and for the district of Kansas, in chancery sitting:

2 Your orator, Samuel F. Craig, a resident of the city of Topeka,

in the county of Shawnee and State of Kansas, and a citizen of the State of Kansas, brings this his bill of complaint against Jacob Smith and George D. Hale, partners, doing business under the firm-name and style of Smith & Hale, also residents of the said city of Topeka, and citizens of the said State of Kansas.

And thereupon your orator, complaining, says that he would most respectfully show unto your honors that heretofore, to wit, on the 9th day August, A. D. 1866, he, your orator, then a citizen of the United States, was the true, original, and first inventor or discoverer of a new and useful improvement in well-tubes; which improvement relates to those well-tubes which at one end are perforated and provided with a sharp point or drill-head, and which said improvement in its main and principal features consists in the attachment to the perforated sides of the well-tubes of a wire screen or gauze, secured to the tube by soldering it at all points except where the perforations are; which screen or gauze prevents sand or dust, etc., from entering the well-tube through the perforations, and thus from being drawn up through the tube to the pump, to which much injury has heretofore resulted from the presence of sand, etc., where well-tubes were used having no protecting screen or gauze; also in an enlarged point or drill-head to the well-tube whereby many advantages are secured, such as that when the enlarged point or drill-head is driven through the ground a hole is produced larger than the perforated
3 tube, thereby protecting the wire screen or gauze from being torn off or otherwise injured in sinking the tube; also by reason of the enlarged hole and the aid of an opening or air-chamber in the point or drill-head below the enlarged diameter thereof, whereby the tube can be easily withdrawn if necessary; which said improvement was not known or used by others before or at the time of the invention or discovery thereof by your orator. That a more full and complete description of the said improvement is given in the schedule and drawing attached to the letters-patent first hereinafter referred to and ready here in court to be produced, reference being had thereto will more fully and and at large appear.

And your orator would further show unto your honor that afterwards, to wit, on the eleventh day of June, A. D. 1867, upon due application being made therefor to the Commissioner of Patents of the United States according to law by your orator, then a resident of the city of Edderville, in the county of Wapello, and State of Iowa, and upon a full compliance by him in all respects with all the necessary requirements of the statutes in such cases made and provided for obtaining the letters-patent herinafter mentioned, and especially upon his making oath that he verily believed that he was the true, original, and first invention or discoverer of the said improvement, and having paid into the Treasury of the United States the sum of thirty-five dollars, and having presented to the Commissioner of Patents of the United States a petition in
4 writing, setting forth his desire to obtain an exclusive property in the said improvement, and praying that letters-patent might, for that purpose, be granted unto him; and having delivered and filed in such office of the said Commissioner of Patents a written description of said improvement in such full, clear, and exact terms, avoiding prolixity, as to enable any person skilled in the art to which said improvement appertained, or with which it is most nearly connected, to make and use the same; and having in the said description fully explained the principle and the several modes in which he had contemplated the application of that principle or character by which said improvements might be distinguished from other inventions; and having in the said descrip-

tion particularly specified and pointed out the improvement which he claimed as his own invention or discovery; and having furthermore accompanied the whole with duplicate drawings and written references, one of which drawings and written references was deposited in the said Patent-Office, and the other of which was annexed to the said letters-patent hereinafter mentioned, which said description and drawings were duly signed by him and attested by two witnesses, and filed in the said Patent-Office; and having moreover furnished to the Commissioner of Patents a model of said improvement of convenient size to exhibit to advantage its several parts; and having made oath as aforesaid thereupon, the said Commissioner of Patents caused letters-patent to be made out and issued in the name of the United States of America in due form of law in all respects, bearing date the said 11th day of June, A.
5 D. 1867, whereby was granted unto him, your orator, his heirs, executors, administrators, or assigns, for the term of seventeen years from the date thereof, the full and exclusive right and liberty of manufacturing, making, constructing, using, and vending to others to be used throughout the United States, the said improvement, which is entitled in the said letters-patent an "improved well-tube;" and the said letters-patent having been signed by W. T. Otto, Acting Secretary of the Interior of the United States, and countersigned and sealed with the seal of the Patent-Office by T. C. Theaker, Commissioner of Patents of the United States, and the same, together with said description, specifications, and drawings, having been duly recorded in the said Patent-Office in books kept for that purpose, were then duly delivered unto your orator, whereby your orator became and was the sole owner of all the rights & p ivileges granted and secured or intended to be secured in and by said letters-patent, reference being had to a copy of the said letters-patent together with all the attestations and signatures thereto, ready here in court to be produced, will more fully and at large appear.

And your orator would further show unto your honors that he believes, and therefore alleges the fact to be, that he was the original and first inventor or discoverer of the said improvement so patented by him as aforesaid, and that the same was not known or used by any other person or persons before or at the time of the invention or discovery thereof by him.

6 And your orator would further show unto your honors that he is the exclusive owner and is in the full enjoyment of all the rights and interests secured to him by the said letters-patent, and that the same is of great value to your orator; that he is now, and has been for a long time last past, engaged in the manufacturing, making, constructing, using, and vending to others the said improved well-tube, and that he is prepared, ready, able, and willing to fill any and all orders or demands for improved well-tube.

And your orator would further show unto your honors that the defendants herein, the said Jacob Smith and George D. Hale, under the said firm-name and style of Smith and Hale, without the consent of your orator being first obtained, have, contrary to equity and good conscience, knowingly, willfully, and purposely combined together and confederated with divers other persons, thereby conspiring to injure and wrong your orator by them, the said defendants knowingly, willfully, and purposely infringing upon your orator's said invention or discovery and letters-patent, as well as his exclusive right under the said letters-patent to make, manufacture, construct, use, and vend to others to be used, the said improved well-tube in the manner and to the extent following, to wit: that they the said defendants, the said Jacob Smith and

George D. Hale, under the said firm-name and style of Smith and Hale, without the consent of your orator having been first procured, as aforesaid, and contrary to equity and good conscience, are now, and have been for more than two years last past, manufacturing, making, using,
7 vending, and offering to vend to others to be used throughout the United States, and especially in the State of Kansas, a well-tube which in its main and principle features consists of a well-tube which at one end is perforated and having attached to the perforated sides thereof a wire screen or gauze to prevent the sand and dust from entering the tube through the perforations, together with an enlarged point or drill-head, which, when driven through the ground, produces the whole larger than the tube thereof, thus protecting the said wire screen or gauze from being torn off or otherwise injured in sinking the tube, and which enables the tube to be withdrawn with ease if necessary, and which said well-tube so manufactured, made, used, sold, and offered for sale to others to be used by the said defendants, is in its said main and principle features identically the same as your orator's said invention, reference being had to a diagram or section of the said well-tube, so used by the said defendants, ready here in court to be produced, will more fully and at large appear.

And your orator would further show unto your honors that the said defendants have heretofore had due and lawful notice that the manufacturing, making, using, vending to others, or offering to vend to others the said well-tube so manufactured, made, used, vended, or offered for sale by them as aforesaid, was and is an infringement upon your orator's said invention or discovery and letters-patent as well as his rights to the said invention or discovery as secured by the said letters-patent.

8 And your orator would further show unto your honors that the said defendants herein, the said Jacob Smith and George D. Hale, under the said firm-name and style of Smith & Hale, in confederation with other persons, are now, in violation of your orator's rights, engaged in the actual manufacturing, making, using, vending, and offering to vend to others to be used, the said tube, so being manufactured, made, used, vended, and offered for sale to others to be used by them as aforesaid; and, although repeatedly requested to desist from the manufacturing, making, using, vending, or offering to vend to others to be used, the said well-tube, have refused and continue to refuse to do so.

And your orator would further show unto your honors that he has reason to believe, and does believe, that the said defendants, in the manner aforesaid, will, unless restrained and enjoined from so doing, continue to so manufacture, make, use, vend, and offer to vend to others to be used, the said well-tube, so manufactured, made, used, vended, and offered by them as aforesaid, and will refuse to pay to your orator any of the profits accruing to them by reason of the said unlawful manufacturing, making, using, vending, or offering to vend to others to be used, the said well-tube hereinbefore described.

And your orator would further show unto your honors that, by reason of the unlawful manufacturing, making, using, vending, and offer-
9 ing to vend to others to be used, as aforesaid, the said well-tube, he, your orator, has sustained damage in the sum of five thousand dollars, for which he is entitled to sue and collect the same in his own right, no part of the same having been paid to your orator.

And your orator would further show unto your honors that if the said defendants be permitted to continue to manufacture, make, use, vend, and offer to vend to others to be used, the said well-tube, so manufact-

ured, made, used, vended, and offered for sale by them, as aforesaid, your orator will sustain great and irreparable damage.

And your orator would further show unto your honors that, inasmuch as he has no remedy at law to prevent the said defendants from so infringing upon your orator's said invention or discovery and letters-patent, in the manner and to the extent aforesaid, and that your orator can only have adequate relief in this honorable court, where matters and things of this kind are made cognizable by the statute;

Therefore, your orator does now most solemnly appeal to the chancery powers of the honorable court, and humbly prays that your honors, by reason of the grievances as herein set forth, will, upon the final hearing of the matters and things presented in this his bill of complaint, grant a writ of injunction, issuing out of and under the seal of this honorable court, or issued by one of your honors, according to the statutes in such cases made and provided, forever restraining and enjoin-

10 ing the said defendants, the said Jacob Smith and George D. Hale, individually, as well as partners, under the firm-name and style of Smith & Hale, together with their attorneys, agents, clerks, servants, and workmen, from further proceeding in any manner whatever to manufacture, make, use, vend, or offer to vend to others to be used, the said well-tube, so manufactured, made, used, vended, and offered for sale by them as aforesaid, and hereinbefore fully described.

To the end, therefore, that the said defendants, the said Jacob Smith and George D. Hale, may if they can show cause why your orator should not have the relief hereby prayed for, or any part thereof, and shall, upon their several and respective corporal oaths, and according to their best and utmost knowledge, remembrance, information and belief, full, true, direct, and perfect answers make to the matters and things hereinbefore stated and charged, and that the said defendants may answer the premises, and full, true, and perfect answers make to the several interrogatories that may be propounded to them herein; and to the end that they, the said defendants, may be decreed to account for and pay over to your orator all profits which they have or might have made, which your orator is informed are, and believes the same to be, very large, by their said infringement upon your orator's said invention or discovery and letters-patent, in the manner and to the extent hereinbefore stated; and to the end that full and complete equity may be done to all the parties herein,

11 Your orator further prays that the restraining order or writ of injunction herein asked for be granted unto him, and, if it may please your honors that a writ of subpœna of the United States of America issuing out of and under the seal of this honorable court be granted, directed to the said defendants, the said Jacob Smith and George D. Hale, commanding them, and each of them, on a day therein to be named, and under a certain penalty, to be and appear in this honorable court, then and there to answer all and singular the premises, and to stand to, abide by, and perform such other and further order and decree as may be made against them, and furthermore that your orator may have such other and further relief in the premises as to your honors may in all equity and good conscience seem meet.

And your orator, as in duty bound, will ever pray, &c.

SAMUEL F. CRAIG,
By MARTIN, BURNS & CASE, AND
ALFRED ENNIS,
His Solicitors.

UNITED STATES OF AMERICA:
In the circuit court of the United States in and for the district of Kansas, to the May term thereof, A. D. 1872.

12 SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE. } Bill in chancery for injunction.

Samuel F. Craig, the complainant in the foregoing bill, being duly sworn according to law, states upon his oath that he has read the foregoing bill of complaint, and is acquainted with the contents thereof; that the material allegations therein contained are true, to his own knowledge, except such matters as are therein stated upon information and belief, and as to these matters he believes them to be true; that he verily believes that he was the true, original, and first inventor or discoverer of the "improvement in well-tubes," as in his said bill of complaint set forth and described, and for the infringing upon which said invention, and the letters-patent therefor, the said bill of complaint is filed; and further he says not.

SAMUEL F. CRAIG.

Subscribed and sworn to before me this the 30th day of January, A. D. 1872.

[SEAL.] W'M HALL JENKINS,
Notary Public for Shawnee Co., Kansas.

(Endorsed:) No. 477. Term No. . Sam'l F. Craig versus Smith & Hale. Bill in chancery for injunction. Circuit court of the United States, district of Kansas. Filed this 2' day of Feb'y, A. D. 1872. A. S. Thomas, clerk. Martin, Burns & Case, and Alfred Ennis, comp't's solicitors.

13 *Appearance.*

And thereupon the clerk of said court entered the appearance of the said defendants in the order-book, which said entry is in the words and figures following, to wit:

Rule day, March 4th, 1872.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE. } In equity.

Now come the said defendants, by William & Handback, their solicitors, and enter their appearance in the above-entitled case and to the complainant's bill.

Answer.

And on this day, to wit, April 8th, 1872, came the defendants, by their solicitors, and filed in the clerk's office of said court their answer to the complainant's bill of complaint filed herein; which answer, with the endorsements thereon, is in the words and figures following, to wit:

UNITED STATES OF AMERICA,
District of Kansas:

In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE.

The answer of Jacob Smith & George D. Hale, defendants, to the
14 bill of complaint of Samuel F. Craig, complainant.

These defendants, now and at all times herafter saving and reserving unto themselves all benefit and advantage of exception which can or may be had or taken to the many errors, uncertainties, and other imperfections in the said complainant's bill of complaint contained, for answer thereto, or unto so much and such parts thereof as these defendants are advised is or are material or necessary for them to make answer unto, these defendants, for answering, say that they have been informed, and admit to be true, that, upon application by the complainant, letters-patent of the United States were granted and issued to the said complainant for an alleged improvement in well-tubes, as described in complainant's said bill of complaint; but these defendants say that they do not know and are not informed, save by said bill of complaint, whether or not said complainant did properly make application for said patent and did comply with all the requirements of the law, and did have said patent issued to him in due form of law, and leave the complainant to make such proof thereof as he shall be advised is material.

2. And these complainants, on information and belief, deny that by virtue of any such patent as mentioned in complainant's bill said complainant became or ever was possessed of or vested with any exclusive right to use, make, or sell in the United States, the State of
15 Kansas, or elsewhere, the alleged improvement patented by the said letters-patent.

3. And these defendants, further answering, deny that the said invention so patented to the complainant is of great or any utility or value, or that the same has been introduced into public use, or that the public generally, or any portion thereof, have acquiesced in and acknowledged the complainant's exclusive right to the same or any portion thereof; and, on information and belief, they deny that the complainant is now, or ever has been, engaged in manufacturing, making, constructing, using, or vending to others the improvement or invention described in his said bill of complaint; and, on like information and belief, they deny that he is now prepared, ready, able, or willing to fill any or all orders or demands for improved well-tubes.

4. And these defendants, further answering, say that they are informed, and believe it to be true, that the said invention and discovery and the same principle and combination patented in and by the letters-patent mentioned in the bill of complaint aforesaid was mentioned and described in a printed publication; that is to say, in a book called "Mackenzie's Book of 5,000 Receipts," reprinted from the London edition by James Kay, j'r, & Brother, in Philadelphia, Pennsylvania, in A. D. 1829, a publication published, issued, and publicly circulated and distributed prior to the supposed invention and discovery by the complainant, the patentee aforesaid of the alleged invention, discovery,
16 principle, and combination, the said description being on page 388 of said book.

5. And these defendants, further answering, say that they are informed and believe it to be true that the said complainant, patentee as aforesaid, was not the original and first inventor and discoverer of the said invention and discovery, or of any material and substantial part of the theory or of the principle and combination patented in and by the letters-patent mentioned in complainant's bill of complaint, but that the same thing and the same principle and combination had been previously combined by and invented & discovered by one J. F. Rabbit, L. M. Rumsey, H. R. & M. I. Watson, Byron Mudge, R. H. S't John, Edward Ashdown & George P. Gilpin, J. C. & M. V. Campbell, Russell R. Lewis, James Luggett, R. F. Osgood, Benj. J. C. Howe, George W. Spear, Milton V. Nobles, W. G. Wright, John Chandler, R. S. Osgood, J. H. Burm, Orin Pratt, Sherburne & Whippell, Charles C. Cole, Esau I. Taylor & William & Battour, P. J. Hearshy, Cornelius H. Sattiam, John W. Ricker, Henry G. Cady, Oscar C. Fox, G. D. Rettingill, A. E. Heberd, who reside at the city of S't Louis, in the State of Mo., and that the same was known to and combined by said parties as early as A. D. 1865, and prior to the time when it is alleged the same was invented and discovered by complainant.

6. And these defendants, further answering, say that they are informed and believe it to be true that the said invention and discovery and
17 the same principle and combination patented in and by the letters-patent mentioned in the bill of complaint aforesaid were in public use and in the United States, at Mobile, Alabama, and elsewhere, as early as the 1st day of March, A. D. 1861, and had been in such use for more than two years before the date of the alleged application of the complainant, patentee as aforesaid, for a patent therefor.

7. And these defendants, further answering, say that they are informed and believe it to be true that the said invention and discovery and the same principle and combination patented in and by the letters-patent mentioned in the bill of complaint aforesaid had been previously invented and discovered by one J. R. Young, who resides at Mobile, Alabama, and thereafter and before the time when it is alleged in the bill of complaint aforesaid the same was invented and discovered by complainant, patentee as aforesaid, and as early as the 5th day of June, A. D. 1864, the same was by the said J. R. Young abandoned to the public, and was, with the consent and allowance of the said J. R. Young, in public use and used at Mobile, Alabama, Memphis, Tennessee, and elsewhere by parties whose names are unknown to these defendants.

8. And these defendants, further answering, say that the well-tube used by them and described in complainant's bill of complaint, as follows: "A well-tube which in its main and principle features consists of a well-tube, which at one end is perforated & having attached to the perforated sides thereof a wire screen or gauge to prevent the sand
18 and dust from entering the tube thro' the perforations together, with an enlarged point or drill-head, which, when driven thro' the ground, produces a hole larger than the tube thereof, thus protecting the wire-screen or gauze from being torn off or otherwise injured in sinking the tube, and which enables the tube to be withdrawn with ease if necessary," is very different in kind from that described in the said letters-patent, and in the specification annexed thereto, and that they have not infringed and still do not infringe upon the rights and privileges alleged in said bill to be secured to the said complainant by said letters-patent.

9. And these defendants, further answering, deny that they have ever contrived to injure said complainant or to defraud him of any

profits, benefits, and advantages whatever; and these defendants deny that they have at any time heretofore manufactured, sold, or used, or are now manufacturing, selling, or using at Topeka, in the State of Kansas, or elsewhere, a well-tube manufactured in accordance with the descriptions set forth in the aforesaid letters-patent, and say that they have not in any way infringed and do not in any way infringe said patent.

And the said defendants, further answering, deny that the said complainant is entitled to the relief or any part thereof in the said complaint demanded; and these defendants pray the same advantage of their aforesaid answer as if they had pleaded or demurred to the said bill of complaint; and these defendants pray leave to be dismissed with their reasonable costs and charges, in this behalf most wrong-
19 fully sustained.

JACOB SMITH AND
GEORGE D. HALE,
Defendants.

WILLIAMS & HANDBACK,
Solicitors for Def'ts.

UNITED STATES OF AMERICA,
District of Kansas, ss:

George D. Hale, being duly sworn, deposes and says that he is one of the defendants named in the foregoing answer; that he has read the same, and knows the contents thereof, and that the same is true, of his own knowledge, except as to the matter therein stated on information and belief, and as to those matters he verily believes them to be true.

GEORGE D. HALE.

Subscribed and sworn to before me this 8' day of April, A. D. 1872.

A. S. THOMAS, *Clerk.*

(Endorsed:) 477. In the circuit court of the United States, district of Ka's. Samuel F. Craig vs. Jacob Smith and George D. Hale. Answer. Filed April 8, 1872. A. S. Thomas, clerk. Williams and Hanback, def'ts' solicitors.

At a term of the circuit court of the United States of America in and for the district of Kansas, begun and held at Topeka, in said district, on Monday, the 27th day of May, A. D. 1872, present the Hon.
20 John F. Dillon, judge, the following proceedings, amongst others, were had, and appear of record in the words and figures following, to wit:

Journal entry.

TUESDAY, *May 28th*, 1872.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE. } 477. In equity.

It is ordered by the court that this case be, and it is hereby, continued to the next term.

Depositions on part of complainant.

And on this day, to wit, November 13th, 1872, depositions on the

part of th plaintiff in said entitled cause were received and filed in the clerk's office of said court, which depositions are in the words and figures following, to wit:

STATE OF MISSOURI,
County of S't Louis, ss :

To James Sewell and Margaret Sewell, greeting :

You are hereby commanded that, all causes and delays set aside, you be and appear before me, Charles H. Chapin, a notary public, at the office of Daniel Dillon, northeast corner of Third and Olive streets, in the city of S't Louis, in said county, on the 9th day of October, 1872, at 9 o'clock a. m., then and there to testify your knowledge touching a certain cause now pending in the circuit court of the United States for the district of Kansas, in which Samuel F. Craig is plaintiff and
21 Smith and Hale are defendants, on the part of the plaintiff. Hereof fail not.

In testimony whereof I have hereto set my hand and affixed my notarial seal this 8th day of October, A. D. 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

In the circuit of the United States in and for the district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE.

It is hereby stipulated and agreed by and between the parties to the above-entitled suit that depositions of witnesses may be taken on behalf of defendants on the 3d day of October, 1872, at office of Daniel Dillon, northeast corner of Third & Olive streets, in the city of S't Louis, in the county of S't Louis, in the State of Missouri, before Charles H. Chapin, a notary public, with like effect and in like manner, and with like power in said notary as if said depositions were taken in accordance with notice duly given and under authority of a commission and dedimus issued out of said court; and said depositions may be read at the trial of said suit, subject only to the objection as to relevancy or competency. And if said depositions be not completed today, the taking of the same may be continued from day till day, at the same place and before the same officer, till completed.

S't Louis, M'o, October 3d, 1872.

22 (Signed)

A. EVANS AND MARTIN BURNS & CASE,
Att'ys for Pl'ff.

WILLIAMS & HANBACK,
Att'ys for Def'ts.

I hereby certify that the foregoing is a true copy of the agreement, the original of which is annexed to and filed with the depositions taken in behalf of *its* defendants in this cause.

Witness my hand and notarial seal this 9th day of October, A. D. 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

UNITED STATES OF AMERICA, EASTERN DIVISION OF MISSOURI,
State of Missouri, County of S't Louis, ss:

The depositions of James Sewall, Margaret Sewall, and William Cranch, taken before me, Charles H. Chapin, a notary public, within and for said county of S't Louis, duly qualified and authorized by virtue of the laws of the State of Missouri to administer oaths and take depositions, did, on the third day of October, A. D. 1872, and on the days following, at the office of Daniel Dillon, northeast corner of Third and Olive streets, in the city and county of S't Louis, in the State of Missouri, to be read in evidence in a cause, suit, or matter in controversy now pending in the circuit court of the United States for the district of Kansas, in chancery, wherein Samuel F. Craig is plaintiff, and
23 Jacob Smith and George D. Hale are defendants, on the part of the plaintiff.

The said deponent, JAMES SEWALL, being first carefully examined, cautioned, and sworn to testify the truth, the whole truth, and nothing but the truth, doth depose and say, in answer to interrogatories propounded on the part of the plaintiff:

Inter. State your name and place of residence.

Ans. My name, James Sewell, and I reside on Fall avenue, east side, between Parson & Sumner, in the city and county of S't Louis and State of Missouri.

Inter. Where did you reside in the spring and summer of sixty-seven?

Ans. In sixty-seven I resided on Fourteenth street, north of Cass avenue; I won't swear point-blank it was that year, but I will swear that it was the year the Lindell Hotel was burned.

Inter. Are you acquainted with one Joseph F. Rabbitt?

Ans. I am acquainted with a young man by the name of Rabbit, but I can't say that his name was Joseph.

Inter. What name does he go by or is known by?

Ans. "Shoat Rabbitt" is his name.

Inter. State whether or not he boarded with you at any time.

Ans. Yes; he boarded with me.

Inter. When did he board with you? What time did he commence, and what time did he quit?

Ans. In the year of the Lindell fire in S't Louis he boarded with me, from April till July the twenty-sixth. He might have come in March.

24 Inter. Did he ever board with you at any other time?

Ans. No; he never did, only that time.

Inter. State as near as you remember the year of the Lindell fire in S't Louis.

Ans. Eighteen hundred and sixty-seven.

Inter. What was he doing, if anything, while he was boarding with you?

Ans. He was working on Soulard street on the extension of the railroad.

Inter. After he quit boarding with you where did he go to board next, if you know?

Ans. On Market street, between Fifth and Sixth, south side, to the best of my knowledge. It may have been between the Sixth and Seventh street, south side of Market.

Inter. State whether or not you saw "Shoat" Rabbitt in company with others driving or putting in a well in Illinois.

Ans. I didn't see him drive; I saw him and another man with pipe partly driven in the ground.

Inter. State where this was.

Ans. Well, it was on the west side of the dyke and north or south of the main street passing from the landing of the South Ferry into Illinois. The ferry was the South Ferry, between S't Louis and East S't Louis, Illinois. I should think the place where they put down the well was about two hundred yards back from the Mississippi River. It was low sandy ground.

Inter State whether or not the well was put in at any dwelling-house.

25 Ans. The place was not enclosed; it was near a stable or something of the kind; there were horses about there.

Int. Did those parties that you saw there have a waggon with them?

Ans. They had a waggon with them.

Int. Do you know where L. M. Rumsay & Company's place of business is in S't Louis?

Ans. I know where it is.

State about the distance from L. M. Rumsay & Company's place of business to this place where you saw this well put in.

Ans. I cannot say; I should think it was a mile or a mile and a half; it might have been two miles.

Inter. State as near as you can the time when you saw Shoat Rabbitt and these other parties at this well.

Ans. I can't fix any particular time. I can't set the time; it might have been three months or three years from the Lindell Hotel fire.

Inter. State whether it was before or after he boarded with you.

Ans. That I cannot state; it might have been while he was boarding with me, or it might have been after.

Inter. What is your best impression as to the time being before or after he was with *me*?

Ans. I cannot say whether it was while he was boarding with me or afterwards.

Int. What was you doing on that particular day?

Ans. Fishing, I believe.

Cross-examination:

Inter. What is your business?

26 Ans. Bricklayer.

Inter. How old are you?

Ans. I think I am between thirty-three and thirty-four years old.

Inter. How long have you lived in S't Louis?

Ans. I came here the new year of eighteen sixty-seven, about the first of January of that year; it was the first time I came to or was in S't Louis.

Int. Are you a married man?

Ans. I am. I was married before I came to S't Louis; my wife came here in the following February. I think I was about a month in advance of her; I think she came the last day of February.

Inter. Where had you boarded before your wife came to S't Louis?

Ans. At Keller's boarding-house, on the north side of Market street, between Thirteenth and Fourteenth streets. M'r Keller was the proprietor. I don't know where he lives now; can't say whether he is living at the same place or not.

Inter. Did you go to housekeeping immediately on the arrival of your wife?

Ans. We boarded about two weeks with a widow lady, M'r's Barry, who lived in an alley north of Clark avenue, west of Keller's three or four blocks. After that we went to housekeeping on Fourteenth street, west side, and north of Cass avenue; we paid rent for the house for the month of July, after the Lindell fire. We left in the first part of August following; we then moved to an alley near Cam Park, I
27 think, but am not sure; we lived there less than a month. I think I then moved to Franklin avenue, west of Eighteenth, and I left there about the following Christmas and went to Seventh and Biddle and started a cigar store. I remained there till the Fourth of July following, on which day I sold out, and moved out a few days afterwards. Then I went to Biddle street, between Eighteenth and Nineteenth. I remained there till about the seventh of November following, when I moved to my own place, where I am now living.

Inter. From whom did you rent the house on Fourteenth street?

Ans. I can't tell whom I rented from. I rented from an agent. He came to the house himself and collected the rent. I rented the whole house, which contained four rooms and a cellar and kitchen, for twenty-five dollars per month, when I went in, but before I left it was reduced to twenty-two dollars per month. This house was six or seven houses north of Cass avenue. I rented from Peter Kenan, who keeps a grocery on the northwest corner of Seventh and Biddle, the north half of the building in which his grocery was.

Inter. Did Mr. Rabbitt board with you before or af er the burning of the Lindell Hotel?

Ans. Before and after, both; he was stopping with me *he was stopping with me* at the time it was burned.

Inter. How long had Mr. Rabbitt been boarding with you before the burning of the Lindell Hotel?

Ans. It might have been a week, month, or two months; I don't
28 know.

Int. Might it not have been even more than two months?

Ans. I can't say. If I knew the day of the fire I could tell closer.

Int. Was any one else boarding with you at the time Rabbitt was, and, if so, who?

Ans. John McCabe, Patrick McCabe, and Peter Devine. They all commenced boarding with me about the same time. I know Peter Devine is dead, and the others, I don't know where they are.

Int. Did you see the Lindell Hotel before it was burned?

Ans. Yes; I saw the Lindell Hotel before it was burned.

Int. How long before it was burned that you first saw it?

Ans. From one to three months.

Int. Had you not seen it a year before it was burned?

Ans. No; I was not here.

Int. Are you not mistaken as to the year, and were you not here over a year before it was burned?

Ans. No; I was not here a year.

Int. What fixes the time of the burning of the Lindell Hotel in your mind?

Ans. My house was entered by thieves, and Shoat Rabbitt lost a watch, and McCabe lost a watch and a suit of clothes. McCabe and I went to the Lindell Hotel to get a policeman, but the officer could not leave, as he was watching the ruins of the fire.

Int. Was it before or after he boarded with you that you saw him with others driving this well in Illinois?

29 Ans. I don't know; I can't say whether he was boarding with

me at the time either. It was in warm weather. I think it was in the spring of the year, between April and August.

Int. Do you know whether Rabbitt had sunk or assisted in sinking any well or wells in Illinois previous to the time you saw this well sunk?

Ans. I don't know whether he did or not.

Int. Did you notice the kind of point that they sunk at this time that you saw them?

Ans. No; I did not.

Int. What time in the day was it that you saw them over there?

Ans. Some time in the afternoon. I believe I crossed over to S't Louis in their waggon coming home.

Int. What did they have in their waggon?

Ans. That I could not tell you.

Int. How long have you known M'r Rabbitt?

Ans. I first got acquainted with him after I came to S't Louis, at M'r Keller's boarding-house.

Int. Are you and he on friendly terms?

Ans. I suppose if I met him I should speak to him. There is some money matters between us.

Redirect examination:

Int. What is this money matter?

Ans. I paid two weeks' board for him at Keller's when I came here, and the balance he owes me for board, about six weeks or something like that. He has not settled his board-bill with me.

Recross-examination:

30 Int. What reason, if any, did Mr. Rabbitt give for not paying you?

Ans. The reason was that he hadn't it, I believe. I stopped running after it.

Int. What was Rabbitt doing when you first knew him?

Ans. He was then out of work.

Int. How long did he continue out of work to your knowledge?

Ans. About a month, to the best of my knowledge.

Int. What was he working at when he was boarding with you?

Ans. Working on the extension of the railroad on Souland street, and also he told me he was working of' on the extension of the Sixteenth-street line. He worked off and on on these two railroads during the time he was boarding with me; he might have been working at something else part of the time, for anything I know.

Int. Might he not have been working for M'r Leach, or L. M. Rumsay & Co., part of that time?

Ans. Yes; he might. I think Leach had something to do with the extension of the railroad.

Int. Do you know whether or not he had worked for M'r Leach before *before* you got acquainted with him?

Ans. I don't know.

JAMES SEWELL.

Sworn to and subscribed before me this ninth day of October, A. D. 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

31 The said deponent, MARGARET SEWELL, being first carefully examined, cautioned, and sworn to testify the truth, the whole

truth, and nothing but the truth, doth depose and say, in answer to interrogatories propounded on the part of the plaintiff:

Int. Please state your name & place of residence.

Ans. Margaret Sewell; I reside in the city of S't Louis, between Parson and Sumner streets.

Int. State whether or not you are the wife of James Sewell, who has just testified?

Ans. I am.

Int. When did you first come to S't Louis?

Ans. In February, in the spring that the Lindell Hotel was burned down.

Int. Where were you living that spring and summer?

Ans. On Fourteenth and Cass avenue till July twenty seventh or eighth.

Int. Are you acquainted with one Joseph F. Rabbitt?

Ans. I am acquainted with Rabbitt. I don't know whether his name is Joseph or not.

Int. What name do you know him by?

Ans. "Shoat."

Int. Did Shoat Rabbitt board with you and your husband any time at S't Louis?

Ans. Yes, sir.

Int. What time did he commence boarding with you, and what time did he quit?

Ans. He commenced boarding about April and quit about the latter part of July of the same year of the Lindell fire. I mean the Lin-
32 dell Hotel fire.

Int. Did he ever board with you at any other time than the time you have mentioned?

Ans. No, sir.

Int. Where were you living at the time he was boarding with you?

Ans. Fourteenth and Cass avenue.

Int. State, if you know, what he was doing during the time he was boarding with you?

Ans. I don't know. I heard him say he was working on the railroad.

Int. State, if you can, the year the Lindell Hotel was burned.

Ans. That I can't do. I think it was in sixty-seven.

Int. Did you come to S't Louis at the same time that your husband did?

Ans. No, sir.

Int. How long after he came did you come?

Ans. About six weeks.

Cross-examination:

Int. Is your recollection of dates and years accurate?

Ans. I don't know, sir.

Int. How do you know it was the same spring that you came to S't Louis that the Lindell Hotel was burned?

Ans. It was the first spring that I was here in the city.

Int. How do you know it was the first spring after your arrival here?

Ans. The first spring I was here I got news that my father had
33 died in Philadelphia. I am certain it was the first spring I was here.

Int. May not Rabbitt have commenced boarding with you earlier than March that spring?

Ans. No, sir; he could not, for we were not housekeeping before March.

Int. Do you know from whom you rented that house on Fourteenth street?

Ans. From Logan, a real-estate agent. His office was then between Second and Third, on Price.

Int. Can you refer us to any one living in S't Louis who knows when you first came to S't Louis?

Ans. Perhaps the lady that I boarded with knows the time I came here.

Int. State her name, and where she lives.

Ans. Her name is M'r's Barrett. I don't know where she lives now. The last place I heard of her living was on Market street; I think somewheres about Tenth street.

Int. Did you go directly to her house when you came to S't Louis?

Ans. I did.

Int. Is there any one in S't Louis who knew you before you came to S't Louis, and knows when you came here, except your husband?

Ans. There are people here who knew me before I came to S't Louis, but they do not know exactly when I came here.

Int. State the names and place of residence of these persons.

Ans. Harry McNichol, who lives on Market street—Tenth and
34 Market; I don't know the number. He keeps a picture-store.

Int. How long had you been in S't Louis before you met M'r McNichol?

Ans. It was in August; the first August I was here; suppose it was in sixty-seven.

Int. At whose instance have you come here to testify in this cause?

Ans. M'r Craig.

Int. When did you first see him?

Ans. Last Sunday night.

Int. Where did you see him then?

Ans. At my house.

Int. Did he call to see you at your house?

Ans. Yes, sir.

Int. Anybody with him when he called?

Ans. Yes, sir; it was the gentleman here, M'r Burnes.

Int. Have you had any conversation in reference to this matter with M'r Craig since that Sunday evening?

Ans. No, sir.

Int. What did M'r Craig say he wanted when he called Sunday evening?

Ans. He wanted to know about what time Shoat Rabbitt boarded with us.

Int. Did he say why he wanted to know?

Ans. I don't know; I didn't pay much attention; I had company for supper. While I was engaged he was talking with my husband.

Int. Are you to be paid anything for coming here, to testify for M'r Craig.

Ans. I don't know, sir.

35 Int. Have you any understanding with M'r Craig to that effect?

Ans. I have no understanding about M'r Craig paying me any money, or anything about it. He offered to pay our fare down here, or something.

Int. What did you hear M'r Rabbitt say, and when was it, as near as you can remember, about working on the railroad?

Ans. I don't know what he said. I just heard him use words about working on the railroad, and I don't know what time.

Int. Are you friendly disposed towards M'r Rabbitt, or otherwise?

Ans. I have nothing at all against him.

Int. Have you and your husband talked over matters and things testified to by you here to-day before you were sworn as a witness here?

Ans. We have talked and laughed about going to court.

Redirect examination:

Int. At the time M'r Craig served the subpœna on you and your husband did he not offer to pay you your witness-fees for coming down here, and wasn't that all that was said about money or pay in any way and didn't your husband say he could pay it after you had come down here?

Ans. Yes, sir; that was all I heard about money or pay.

MARGARET SEWELL.

Sworn to and subscribed before me this 9th day of October, A. D 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

36 The said deponent, WILLIAM CRANCH, being first carefully examined, cautioned, and sworn to testify the truth, the whole truth, and nothing but the truth, doth depose and say, in answer to interrogatories propounded on the part of the plaintiff:

Int. What is your name, age, and place of residence?

My name is William Cranch; age twenty-seven, and my residence is S't Louis, Missouri.

Int. How long have you lived in the city of S't Louis, and what has been your business?

I have lived in S't Louis eleven years, and am in the newspaper business.

Int. State, if you know, when the Lindell Hotel, in the city of S't Louis, was burned.

I know when it was burned. It was burned on the night of Saturday, March thirtieth, eighteen hundred and sixty-seven.

Cross-examination:

I I was connected the office of the Missouri Democrat at the time of the burning of the Lindell Hotel in S't Louis.

Int. How do you know the Lindell was burned on the night of the thirtieth of March, eighteen hundred and sixty-seven?

Ans. I was there and saw it burn.

WILLIAM CRANCH.

Subscribed and sworn to before me this 9th day of October, A. D. 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

37 I, Charles H. Chapin, a notary public in and for the county of S't Louis and State of Missouri, do certify that by agreement of counsel I caused the above-named James Sewall, Margaret Sewall, and William Cranch to come before me at the time and place in said caption

stated, because the said James Sewall, Margaret Sewall, and William Cranch live at a greater distance than one hundred miles from the place of trial of said cause herein, as is stated, and I believe I did not cause any notice to be served on the adverse party, because said depositions were taken by agreement of parties, signed by their respective attornies, a true copy of which agreement is hereto annexed, the original being annexed to and filed with the depositions taken on the part of the defendants herein.

And I further certify that the plaintiff and Burns, esqr., his attorney, and the defendants, by their attorney, Daniel Dillon, were present during the taking of these depositions.

And I further certify that said deponents were by me severally carefully examined, cautioned, and sworn then and there to testify the whole truth; that said depositions were wholly reduced to writing by me in the presence of said wit. respectively, and that the said several deponents then and there, in my presence, severally subscribed their names to their respective depositions; that I am not counsel or
38 attorney for either party, or interested in the result of said suit.

All of which is certified to said court, and the cause wherefore these said depositions are taken, and for the manner in which it is done.

In testimony whereof I have hereto set my hand and affixed my notarial seal this ninth day of October, A. D. 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

Notarial fees:

To taking & certifying 46 folios, 20 c'ts per fol	$9 20	
To 1 subpœna	50	
		$9 70
To postage		30
		10 00

Witness-fees:

James Sewell, attendance 1 day	1 50
Travel	25
Margaret Sewell, attendance 1 day	1 50
Travel	25
William Cranch, attendance 1 day	1 50
Paid by the plaintiff	$15 00

(Endorsed:) No. 2. Opened by written stipulation of counsel, at the instance of plaintiff's attorney, Topeka, Nov. 13, 1872. A. S. Thomas, clerk. No. 477. Samuel F. Craig vs. Smith & Hale. Depositions for the plaintiff.

39 *Depositions on part of defendants.*

And on this day, to wit, November 13th, 1872, depositions on the part of the defendants in said entitled cause were received and filed in the clerk's office of said court, which depositions are in the words and figures following, to wit:

L. M. RUMSEY. MOSES RUMSEY.

[Office of L. M. Rumsey & Co., No. 610 North Second street, S't Louis, M'o', manufacturers and dealers in pumps, fire-engines, corn-shellers, cider-presses, wheelbarrows, fire-arms, carriage-bolts, &c.]

S'T LOUIS, *Aug.* 10, 1867.

Mes'rs CRAIG & BRO., *Eddyville:*

GENTLEMEN: Your agents' orders are now all filled, excepting those that have been countermanded.

Several of the parties refuse to receive the goods on account of $7 for point, which causes us good deal of trouble. Do you wish any more points sent to you there? We will have your name on all points after this.

We will report amount of points sold as soon as we get returns.

Yours, truly,

M. M. RUMSEY & CO.

EXHIBIT X.—C. H. CHAPIN, *Notary Public.*

40 L. M. RUMSEY. MOSES RUMSEY.

[Office of L. M. Rumsey & Co., No. 610 North Second street, S't Louis, M'o', manufacturers and dealers in pumps, fire-engines, corn-shellers, cider-presses, wheelbarrows, fire-arms, carriage-bolts, &c.]

S'T LOUIS, *Aug. 7th*, 1867.

We, the undersigned, hereby agree to pay to Craig Bro's, of Eddyville, Iowa, a royalty of $2.00 (two dollars) for each of the Craig patent drive-well points we manufacture and sell, less a commission of 10%, which we are to deduct; and we hereby agree to make a full report of all points sold on the first of each month for the previous month, and to pay the above rates at the time of making the report.

L. M. RUMSEY & CO.

[Stamp.]

EXHIBIT V.—H. C. CHAPIN, *Notary Public.*

L. M. RUMSEY. MOSES RUMSEY.

[Office of L. M. Rumsey & Co., No. 610 (old No. 141) North Second street, S't Louis, M'o', manufacturers and dealers in pumps, fire-engines, corn-shellers, cider-presses, wheelbarrows, fire-arms, safes, &c.]

S'T LOUIS, M'o', *July* 13, 1867.

H. L. CLEMENT, *Gen'l Agent Craig's Patent Drive-Well, Eddyville, Iowa:*

41 DEAR SIR: Your favor of 9th is rec'd, and, in reply, would say that we have had a man at work on your point and have them about completed, and will f'w'd on to you at once. We will fill all your agents' orders C. O. D.

We called up to Boyd & Co.'s office, but could never find them in. Will try again.

Yours, truly,

L. M. RUMSEY & CO.

EXHIBIT Z.—C. H. CHAPIN, *Notary Public.*

In the circuit of the United States in & for the district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE.

It is hereby stipulated and agreed, by and between the parties to the above-entitled suit, that depositions of witnesses may be taken on be-

half of defendants on this 3d day of October, 1872, at office of Daniel Dillon, northeast corner of Third & Olive streets, in the city of S't Louis, in the county of S't Louis, in the State of Missouri, before Charles H. Chapin, a notary public, with like effect and in like manner, & with like power in said notary, as if said depositions were taken in accordance with notice duly given and under authority of a commission and dedimus issued out of said court, and said depositions may be read at
42 the trial of said suit, subject only to the objection as to relevancy or competency, and if said depositions be not completed to-day, the taking of the same may be continued from day till day, at the same place and before the same officer, till completed.

S't Louis, M'o', October 3d, 1872.

A. ENNIS AND MARTIN BURNS & CASE,
Att'ys for Pl'ff.

WILLIAMS & HANBACK,
Att'ys for Def'ts.

UNITED STATES OF AMERICA,
EASTERN DISTRICT OF MISSOURI,
State of Missouri, County of S't Louis, ss:

The depositions of Samuel F. Craig, J. F. Rabbitt, and L. M. Rumsey, taken before me, Charles H. Chappin, notary public, within and for said county of S't Louis, duly qualified and authorized by virtue of the laws of the State of Missouri to administer oaths and take depositions, on the third day of October, A. D. 1872, and days following, at the office of Daniel Dillon, on the northeast corner of Third and Olive streets, in the city and county of S't Louis, in the State of Missouri, to be read in evidence in a cause, suit, or matter in controversy now pending in the circuit court of the United States for the district of Kansas, in chancery, wherein Samuel F. Craig is plaintiff and Jacob Smith and George D. Hale are defendants, on the part of the defendants.

43 The said deponent, SAMUEL F. CRAIG, being first carefully examined, caution', and sworn to testify the truth, and the whole truth, and nothing but the truth, doth depose and say, in answer to interrogatories propounded on the part of defendants:

Int. Where do you reside, Mr. Craig?

Ans. In Topeka, in the State of Kansas.

Int. How long have you resided there?

Ans. About three years and a half, to the best of my recollection.

Int. Where did you live previous to going to Topeka?

Ans. I lived about a year and a half at North Lawrence last before going to Topeka to live.

Int. Where did you live previous to going to North Lawrence?

Answer. In the town of Eddyville, county of Wapello, in the State of Iowa. I arrived at Eddyville on the first day of December, in the year eighteen hundred and sixty-two, I think, and I left there about the first of October, eighteen hundred and sixty-seven, and settled in North Lawrence shortly after.

Int. What business were you engaged in while living at Eddyville?

Ans. Until I went into the Army I was not engaged in any particular business. When I returned from the Army in eighteen hundred and sixty-five, I was engaged a while in the book business. In the winters of sixty-five and six I was engaged in the coal business. In the spring of sixty-six, from late in the spring until the first of June,
44 I was engaged in teaming; from the first of June till the fifth of

June, I was engaged in hauling gravel. After that time to the present I have been engaged in the drive-well business; that has been my principal business.

Int. In what manner or way did you engage in the drive-well business on the fifth of June, sixty-six?

Ans. I purchased a patent-right, called Ashdown and Gilpin's improved drive for sinking wells. I purchased the right for nineteen counties in Iowa at the cost of twenty-five hundred dollars.

Int. Did you then engage in sinking wells or manufacturing or selling these patents?

(Interrogatory objected to by the plaintiffs' counsel as immaterial and irrelevant.)

Ans. I took what he showed me as his drive, and attempted to put in a well. I had some trouble with it on account of its failing to work as represented by the parties I purchased of. I then became alarmed about having been swindled by these parties having this patent-right, and upon inquiry at the Patent-Office, I found that Ashdown & Gilpin's patent related to some device about a drive-head to put on the top of the gas-pipe to receive the blows of the sledge or maul used to drive with and keep it from injuring the pipe, and did not relate any further to the well or the bottom part of the pipe. These parties representing this patent-right had represented to me and made me believe that this patent they represented covered the entire right of making drive-
45 wells. They showed me what they called their "bottom-piece," which consisted of a piece of gas-pipe, with small holes perforated in the sides of it and the lower end stopped with a cast-iron plug of the same size of the pipe at its extreme diameter, and fastened in the pipe by a pin through the pipe and plug, and represented to me that they did and I could drive that gas-pipe down anywhere, and with a suction pump, by pumping awhile, create a reservoir around this perforated pipe, by drawing the dirt out, and by this means could make a durable and never-failing well; that by reason of the tube being driven into the ground, and all being air-tight, the suction of the pump would draw every particle of water from the bottom of this well, and thereby make an inexhaustible well.

I took this perforated piece of gas-pipe and this plug as previously described, and, as I said before, attempted to put in a well. After I had driven it to the required depth and applied the pump I pumped up sand, gravel, dirt, and water. I pumped as hard as I could for about half an hour, and the sand, gravel, dirt, and water begun to grow less and less in quantity and soon after ceased to flow altogether. I then took the pump to pieces to examine it and see why it would not pump. I found the pump-bucket, leathers, and valves, very badly cut with the sand, and thinking that might be the difficulty, I put on new buckets and valves and again applied the pump to the valve, but it did not do any good.

46 I then procured a lever and pulled up the pipe to see what was the matter at the bottom of the well, and I found that the well-tube was filled inside with coarse sand for about six feet from the bottom up that had been drawn into the pipe by the suction of the pump. I found the sand inside of the tube to be the cause of the stoppage of the water. I cleaned out the well-tube and put it back with the same results only the water flowed longer the last time than it did the first. I repeated the operation after the two first times about three times in the course of a month with similar results each time.

I did nothing further to improve that well-point for about two months

afterward. I then loaded up my gas-pipe and pump and started out and concluded I would get rid of my patent. I went to a small town in Keokuk County, Iowa, and inquired about water, and was assured that water could be easily reached there. I put down a tube I got from these men I bought the patent of, similar to the other one described. The soil was clay-soil, different from the first place where I put in a pump; when I got down about the depth of twenty-eight feet the tube became fast and I could not drive it any farther. I then tried to draw it out, but could not succeed. I used a fifteen-foot lever and had five or six men to help me. I then turned the pipe backwards with the tongs and unscrewed and took out about eight feet of the pipe driven down
47 and left the balance in the ground. The reason I could not draw it out was on account of the friction on the side of the tube, it being all the way of one size.

On that trip I made another trial with a similar tube at Wapello, Louisa County, Iowa. The soil here was loose and sandy, sand being somewhat finer than that at Eddyville, and what is commonly called quicksand, or washsand. The tube was easily driven and the water easily obtained at a depth of about twenty-eight feet. At this place when I applied the pump to the well and tried to pump I could bring nothing up, neither sand, gravel, or water. I found there was water in the tube before I put the pump on. After trying it I took the pump off to see what was the matter, and on putting my trial-rod down the tube I found it was stopped up ten or twelve feet from the top of the tube. I then took up the well-tube and found it was full of sand from the bottom up about fifteen or seventeen feet. I repeated this operation some six or eight times.

I spent two days in this place trying to make the pump work, and finally did get some water. Each trial was similar to the first, except that the sand was less in the tube each time, and I found that the sand was coarser in the tube each time, the finer sand being lighter, pumped out first, but I could not pump out enough to create any reservoir at the bottom of the well. I ascertained this from the fact every
48 time I put down the well-tube I had to drive from the water-line down, the hole made by former trials having been filled up each time. Finding it all a failure I drew out the well, loaded up, and went home discouraged.

Int. How long were you out on this trip?

Ans. From about the fifth of June, sixty-six, to the first of the following July.

Int. At what point or place did you sink this first well?

Ans. At Eddyville, at my own house.

Int. Who worked with you in sinking the first well?

Ans. I think my brother, J. R. Craig, assisted me; I would not be certain of that.

Int. Anybody else?

Ans. Not that I recollect.

Int. Who were your nearest neighbors at that time?

Ans. M'r Van Ness, M'r Thompson, j'r, Squire William Boyd.

Int. Are those people living there as you know?

Ans. They are.

Int. They all knew that you were sinking this well?

Ans. I don't know that the neighbors knew it, but it was talked of down town. I kept it quiet.

Int. On whose land did you sink the second well?

June, I was engaged in hauling gravel. After that time to the present I have been engaged in the drive-well business; that has been my principal business.

Int. In what manner or way did you engage in the drive-well business on the fifth of June, sixty-six?

Ans. I purchased a patent-right, called Ashdown and Gilpin's improved drive for sinking wells. I purchased the right for nineteen counties in Iowa at the cost of twenty-five hundred dollars.

Int. Did you then engage in sinking wells or manufacturing or selling these patents?

(Interrogatory objected to by the plaintiffs' counsel as immaterial and irrelevant.)

Ans. I took what he showed me as his drive, and attempted to put in a well. I had some trouble with it on account of its failing to work as represented by the parties I purchased of. I then became alarmed about having been swindled by these parties having this patent-right, and upon inquiry at the Patent-Office, I found that Ashdown & Gilpin's patent related to some device about a drive-head to put on the top of the gas-pipe to receive the blows of the sledge or maul used to drive with and keep it from injuring the pipe, and did not relate any further to the well or the bottom part of the pipe. These parties representing this patent-right had represented to me and made me believe that this patent they represented covered the entire right of making drive-
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48 time I put down the well-tube I had to drive from the water-line down, the hole made by former trials having been filled up each time. Finding it all a failure I drew out the well, loaded up, and went home discouraged.

Int. How long were you out on this trip?

Ans. From about the fifth of June, sixty-six, to the first of the following July.

Int. At what point or place did you sink this first well?

Ans. At Eddyville, at my own house.

Int. Who worked with you in sinking the first well?

Ans. I think my brother, J. R. Craig, assisted me; I would not be certain of that.

Int. Anybody else?

Ans. Not that I recollect.

Int. Who were your nearest neighbors at that time?

Ans. M'r Van Ness, M'r Thompson, j'r, Squire William Boyd.

Int. Are those people living there as you know?

Ans. They are.

Int. They all knew that you were sinking this well?

Ans. I don't know that the neighbors knew it, but it was talked of down town. I kept it quiet.

Int. On whose land did you sink the second well?

Ans. I do not know whose land it was; my brother was with me at that time.

Int. How far was that place from Eddyville?

Ans. About twenty-two miles.

Int. You say that you made application to the Patent-Office about this patent; did you make it in person?

Ans. I did not.

49 Int. Through whom did you make this application to the Patent-Office?

Ans. Trough Munn & Company, patent solicitors, No. 37 Park Row, city of New York, I believe.

Int. What did you do after sinking the third well?

Ans. I tried to put in another well on Ridge street, Eddyville, Iowa.

Int. What did you do after you got through with that?

Ans. That was on the 4th of July, sixty-six, and I then passed some fifteen or twenty days at home studying over the whole matter, and thinking over everything I had done, and trying to study some way to get out of my dilemma.

Int. Have you your patent with you?

Ans. I have a copy of the printed part here, and I think I have the original at the hotel, or my attorney may have it.

Int. If you have the original, will you produce it after dinner?

Ans. I will.

Int. M'r Craig, did you ever bring a suit against L. M. Rumsey & Co., of S't Louis, in reference to these well-tubes?

Ans. I never did.

Int. In any suit pending in Iowa between you and L. M. Rumsey & Co., of S't Louis, did the question of any infringement by them of your rights under this patent become involved?

Ans. No, sir.

Int. Did you not in the suit by L. M. Rumsey & Co. against you, on the account, set up as an offset or counter-claim, damages which

50 you claimed of them in consequence of an alleged infringement by them of your rights under this patent?

Ans. I do not recollect exactly what was set up in the counter-claim, but everything that was set up in relation to the infringement was ruled out by the court for want of jurisdiction. This suit was pending in the State court in Wapello County, Iowa; I think it was called the State district court.

Int. In that counter-claim do you remember the date on which you alleged you discovered the improvements in well-tubes claimed by you in this patent?

Ans. I do not recollect the date which I alleged them.

Int. You alleged the true date there, whatever it was, did you not?

Ans. I don't know; I was very ignorant at that time of what I ought to do to protect myself.

Int. Were you ignorant at that time of the true date of the discovery by you of the improvements claimed by you in this patent?

Ans. I suppose I was not ignorant of the date of my invention, I might have been ignorant of the proper date to claim my right from, as between the date of my invention, the date of my application for a patent, and the date of my patent letters, and I might have made an error in the dates in my answer, for all I know.

Int. Were you so ignorant?

Ans. I don't recollect now whether at that time I was that ignorant or not.

Int. Have you reason to believe that you were?

51 Ans. I have reason to believe that I was so ignorant of my rights.

Int. What are those reasons?

Ans. I had never had anything to do with patent-rights until this case, that is, till the fifth of June, sixty-six, as I stated before.

Int. How long since, to the best of your recollection, was this suit of L. M. Rumsey & Co. commenced against you?

Ans. I think that suit must have been begun in the winter of sixty seven & eight.

Int. Did you ever think of bringing a suit against L. M. Rumsey & Co. for infringement of your patent before they brought their suit against you?

Ans. No, sir; not that I recollect of.

Int. Did you not know previous to that *that* time, that they were manufacturing well-tubes similar to these you now claim to be an infringement of your patent?

Ans. Yes, I know they were manufacturing well-tubes that were an infringement of my patent before that. They had manufactured a while under my patent.

Int. Did you not know before that suit was brought that they were manufacturing well-tubes similar to these which you now claim to be an infringement upon your patent, for sale generally, or for other persons than yourself?

Ans. I don't think I knew it of my own personal knowledge.

Int. What knowledge did you have on the subject?

Ans. To the best of my knowledge, if I had information, it came through my brother while I was in Kansas.

Int. When were you first at L. M. Rumsey & Co.'s and saw them manufacturing well-tubes?

52 Ans. I was first at L. M. Rumsey's store August the ninth, eighteen hundred and sixty-seven. I did not see them manufacturing at that time.

Int. When you were in their store August ninth, sixty-seven, did you see well-tubes there for sale?

Ans. I did not see any except what they manufactured for me under contract.

Int. How many did you see then?

Ans. Between twenty-five and thirty, I think.

Int. In what place or position did you see them?

Ans. On the sidewalk in front of the store ready for shipment to me and my agents.

Int. Did you see any others besides those?

Ans. I didn't see any others in the possession of Rumsey that I know of at all.

Int. Did you see any others at all; if so, in whose possession, and in what place?

Ans. I saw one Leach with a well-tube called the S't John's drill-head, a patent; I have no recollection of seeing any others. I saw Leach at Rumsey's.

Int. How many of these drill-heads did you see?

Ans. I do not recollect of seeing but the one he showed to me.

Int. Did he tell you he had been using them?

Ans. He told me he had been trying to make wells with them, but did not succeed very well.

Int. Who manufactured them for him?

Ans. I do not know who manufactured them for him.

Int. Had you never been to Rumsey's before August ninth, eighteen hundred and sixty-seven?

Ans. No, sir.

Int. Had you ever ordered any well-tubes from him before that time?

53 Ans. Yes, sir.

Int. When did you order well-tubes first from L. M. Rumsey & Co.?

Ans. I think it was in May or June, eighteen hundred sixty-seven.

Int. To whom did you give that order?

Ans. I ordered them by mail from L. M. Rumsey & Co.

Int. How did you know they had tubes for sale?

Ans. I had been corresponding with them about manufacturing my well-tubes.

Int. Will you describe these drill-heads that you saw at Rumsey's on the ninth of August, sixty-seven?

Ans. It was a hollow cast-iron made after the style of the S't John's patent. It had openings up and down it in the side to admit water; it was tapering from the upper end down to a point. The openings in the side were covered with perforated tin. It had a screw in the upper end to fasten it to the gas-pipe; it had flutes on the outside surface winding around it. The openings were larger on the inside than they were on the outside.

Int. State whether there was any arrangement connected with this drill-head to prevent the dirt and gravel from entering the tube by means of the appertures intended for the water?

Ans. I was told that the perforated tin was for that purpose. M'r Leach said it would not work.

Int. How was the size of the head with reference to the size of the tube or gas-pipe?

Ans. I don't know.

54 Int. Did you not see any of these points attached to the gas-pipe?

Ans. Not that I recollect.

Int. Will you swear positively that you ever saw any of the S't John's patent drill-heads at L. M. Rumsey's?

Ans. I will not swear positively that I saw an exact representation of the S't John's patent drill-head there, but I saw one similar to it, such as I have described.

Int. Did you not know that L. M. Rumsey & Company had been manufacturing well-tubes prior to your giving them your first order in sixty-seven?

Ans. I did not.

Int. How did you come to make their acquaintance at all?

Ans. An agent of their house called at our store in Eddyville, Iowa, and solicited us to buy our pumps and gas-pipe of them. I gave him an order for gas-pipe and pumps which was filled satisfactorily. I ordered at other times, subsequently, pumps and gas-pipes.

Int. Was anything said about well-tubes at that interview you had with that agent?

Ans. Yes, sir; I showed him one of my well-tubes; explained it to him. I told him I had applied and expected to get a patent on it. I told him that as soon as I did get a patent I intended to let some pump-dealers manufacture them for me on a royalty. He said he had no doubt that his firm would manufacture them for me for a royalty. He

said they would sell me the pumps cheap and do all they could to
55 help me introduce them into market. I showed him also a model of a drill-point that was intended to be attached to my well-tube instead of the drive-point in case of striking rock. I explained this drill-point to him and the operation of it. He requested me to correspond with his firm in regard to it. He said that my well-tube was the best he had ever seen and he had no doubt it would be a success from the fact that my well-tube would exclude the sand and that the presence of sand had been the great drawback with the drive-wells.

Int. Do you know who this agent was?

Ans. I do not know his name.

Int. State as nearly as you can the time when this interview occurred.

Ans. To the best of my recollection it was in March, eighteen sixty-seven.

Int. Had you applied for the patent when he was there?

Ans. I had, to the best of my recollection. My recollection is that it was before this agent was there.

Int. Had you any of your well-tubes manufactured at that time?

Ans. I think I had a well-tube made identically the same as patented, but the mechanical work was not good.

Int. Who manufactured the points for you?

Ans. The first points I had manufactured by James Thompson of Eddyville, from the first of August, sixty-six, till winter set in. I had some cast at Chicago and some at Ottumwa. The firm who man-
56 ufactured points for me in Chicago was Walworth, Furso & Company, to the best of my recollection. Those made at Ottumwa were cast at the Ottumwa foundry. I do not know the persons' names.

Int. Were these points similar to the points described in your letters-patent?

Ans. Yes; they were substantially the same. They covered the same principle.

Int. Did they all, that is all made previous to this interview with Rumsey's agent, have this air-passage in them G as in your letters-patent?

Ans. They did not all have it; the wrought-iron ones did not have it.

Int. Did all those manufactured in Chicago have this air-passage?

Ans. They were not finished up that way in Chicago. If I wanted it in, I put it in, & if not, I didn't.

Int. Did you put an air-passage in any of the wrought-iron ones?

Ans. No, sir.

Int. Is the air-passage a principle contained in your patent?

Ans. I don't think the air-passage is a principle in itself.

Int. Is the air-passage an essential part of this invention which you claim?

Ans. It is essential in certain localities. It is the least essential of any part of this point.

Int. Can a man make one of these points substantially like your patent and omit the air-passage?

Ans. Yes, sir.

Int. When did you first apply for letters-patent on improvement in well-tubes?

57 Ans. I do not recollect the date.

Int. How long previous to the date of your patent, as near as you can tell?

Ans. About three months, maybe four.

Int. Did you make more than one application?

Ans. I did not.

Int. Did they not refuse to grant you a patent on your first application?

Ans. They did not refuse.

Int. What did they do?

Ans. They granted me my patent on my first application.

Int. Did they raise any objections at all to granting it that you know of?

Ans. No, sir.

Int. Did you make any alterations or changes in your specifications or drawings after filing your application?

Ans. I did not.

Int. Did the first specifications and drawings you sent to Washington contain this air-passage?

Ans. Yes, sir.

Int. Is the drawing attached to your letters-patent the one originally sent to Washington?

Ans. Yes, sir.

Int. Is the drawing attached to your letters-patent the one originally sent to Washington?

Ans. Yes, sir.

Not being able to complete the taking of said depositions, by reason of the want of sufficient time, I adjourn the further taking of the same till to-morrow, then to be continued at the same place under the stipulations hereto annexed.

CHARLES H. CHAPIN,
Notary Public.

58 Pursuant to adjournment as above stated, on the fourth day of October, 1872, I continued the taking of said depositions as follows, viz:

Int. Who acted as your agent in procuring this patent for you?

Ans. Munn and Company. I gave them a description of my invention and they prepared the specifications and drawing and submitted them to me. I approved them, signed them, and returned them to Munn & Company.

Int. Did Munn & Company make any changes in the specifications and drawings after you first signed them?

Ans. They did not.

Int. Is the drawing attached to your letters-patent the original one signed by you?

Ans. It is the original drawing.

Int. Was the name "S. F. Craig" on the drawing attached to your specification written by you or not?

Ans. The name S. F. Craig on the drawing is not my signature.

Int. Who wrote that name?

Ans. I don't recollect of seeing anybody write it.

Int. Did you write it?

Ans. I don't think I did, but I might.

Int. Are the specifications forming a part of your patent the specifications signed by you?

Ans. The specifications I signed were in writing, not in print.

Int. Were they precisely similar to the ones attached to your letters-patent?

59 Ans. Yes, sir.

Int. Where are the originals which you signed?

Ans. In the Patent-Office, I suppose.

Int. Did you never sign but one specification for obtaining this patent?

Ans. Only signed one.

Int. Is that the one which is in Washington?

Ans. I suppose it is there.

Int. Did Munn & Company change the specifications or drawings after you signed them?

Ans. Not that I know of.

Int. Did you ever understand or were ever informed that they had?

Ans. I never understood or was informed that they had been changed.

Int. Did you not first apply for a patent on the screen and enlarged point without the air-passage?

Ans. I did not.

Int. Did you apply for any patent omitting the air-passage?

Ans. I did not.

Int. Did you or your attorneys have any correspondence with the Patent-Office department in relation to securing a patent not embracing the air-passage?

Ans. We did not.

Int. How long were you engaged in working at the first well sunk by you in Eddyville in eighteen sixty-six?

Ans. I worked at it several times from an hour to a half a day at a time, some two or three or three or four times in the course of a month or two.

60 Int. How much time intervened between the date you commenced working at the first well and the time at which you commenced working at the second well?

Ans. I should think it was from fifteen to twenty days; might not have been more than ten days.

Int. At what time did you first enquire at the Patent-Office in relation to Ashdown & Gilpin's patent?

Ans. I don't recollect the date; I am pretty certain it was in sixty-six some time.

Inter. Was it in fall, summer, or winter?

Ans. I do not recollect.

Int. What caused you to make inquiries at the Patent-Office in regard to it?

Ans. I wanted to find out just what the claims under the patent were.

Int. Had you seen the patent?

Ans. No, sir.

Int. Did you make these inquiries at the Patent-Office before or after you made the invention which you claim in your patent?

Ans. I do not recollect.

Int. After you got through sinking the well on Bridge street in Eddyville in the summer of sixty-six what did you do?

Ans. To the best of my recollection I spent fifteen or twenty days at home studying over the matter trying to study up some way to get out of my difficulties. I then went to Ottumwa and traded my right under the Ashdown and Gilpin patent in Keokuk County to some parties for Columbia Township, in Wapello County—the same patent.

61 Int. Who were these parties with whom you traded?

Ans. I don't recollect their names now.

Int. Were there more than one?

Ans. There appeared to be two interested in it.

Int. Do you know where they live now?

Ans. I do *not* recollect one of their names now; it was John Shea.

Int. They lived in Ottumwa.

Int. How long did it take to close up this negotiation?

Ans. I think I did it in one day.

Int. How far is it from Ottumwa to Eddyville?

Ans. About fifteen miles.

Int. What did you do next after making this trade?

Ans. I believe I spent some time in getting ready and making arrangements to make some experiments to see if I could make the drive-well work. I succeeded in getting Zacharius Grubb, of Eddyville, to agree to take a well if I could make it work. I commenced trying to put it in the first day of August, sixty-six, at his place near Bridge street, in Eddyville.

Int. How long did you work at that well?

Ans. One or two days; I worked at the same well afterwards, but don't recollect the exact time.

Int. Did you encounter any difficulties sinking that well?

Ans. I did; in getting it to work well.

Int. Who made the point for you used in boring that well?

Ans. I think it was one I got from the parties of whom I bought the patent. I had quite a number of them.

Int. Will you describe that point?

Ans. If I recollect right, when I commenced it was a piece of
62 one-inch gas-pipe, cast-iron plug in the lower end, gas-pipe perforated to admit water. When I quit, after about nineteen trials, it had a wire screen over the perforated holes to keep the sand out, though the screen was somewhat torn and admitted the sand yet.

Int. What did you do next, after you got through with this well?

Ans. I think I put in a well for R'uben Binder, near the same place.

Int. Have any difficulty with this well?

Ans. Yes, sir.

Int. Same difficulty you experienced before?

Ans. Similar difficulty.

Int. What did you do next?

Ans. I kept on putting in wells, with about the same degree of success, up to about the ninth of August, sixty-six.

Int. How many wells did you put in from the time you put in Binder's well up to the ninth of August, sixty-six?

Ans. My best recollection is that I put in about one a day.

Int. How many days intervened between the time you got through with Binder's well and the ninth of August?

Ans. Somewhere from four to six days.

Int. What happen'd next?

Ans. About the ninth of August, to the best of my recollection, I begun to run short of material for putting in wells. I had a piece of
63 one-inch gas-pipe, that had the thread of the screw on one end of it spoiled. I took this pipe to James Thompson's blacksmith shop to have holes drilled in the side of it at one end, and to have a point put in it so I could use it for making a well. M'r Thompson was not at home, but Samuel Thompson, his apprentice, had charge of the shop, and I prevailed on him to try to do my work, but he was not willing to use any new iron. I found a piece of scrap-iron and we succeeded in welding a point in the tube. When we got it welded in we found it much too large, as we supposed, but for fear we could not better it, I concluded to try to drive it. I drove it, and found it drove much easier than a small point. I made a hole in the ground much larger than the former points I had used, and larger than the

pipe. Seeing it was so much better than the other I concluded not to leave it in the well, but to keep it for a kind of driving-rod to drive the first time in making wells, and withdraw it and put in a pipe with a screen on it. By this means I succeeded better than I had before. I continued making wells in this way till about the thirteenth of the same month, then the screw became damaged on the other end of this same tube, when I concluded to put a screen on that tube and leave it in a well, and have another made similar to it. I accordingly drove it down, and withdrew it, and took it to the tin-shop and had a screen
64 soldered on over the perforated holes above the large point, and put it back in the same hole where I had withdrawn it. When I went to put it back in the hole where I had withdrawn it, I noticed that I might have put the screen on before I drove it the first time, and on account of the enlarged point the screen would not have been torn driving as it would with the small point that I had been using before that. I then continued for some time to have large points made at the blacksmith shop, and have the screen soldered on over the perforations, and around the pipe, and above the enlarged point. By this means I could drive my well-tube with the screen on it and without injuring the screen, as the large point would make and leave a hole in the ground larger than the tube, thereby forming a chamber in the ground around the tube as the tube was driven, thus protecting the screen from being torn in driving, thus forming a good well.

Int. Who was the tinner who put on this screen?

Ans. Charley Hewitt, son-in-law of William Amos.

Int. Did you experiment any more that fall?

Ans. Yes; I continued to experiment, and made some discoveries that summer or fall.

Int. Up to what time that fall did you continue to sink wells and experiment?

Ans. I suppose I continued to put in wells till cold weather. Some time during the summer I attempted to put in a well on a creek
65 bottom. I drove down my tube about twenty-two feet and struck rock.

Int. At what time did you first get this man to put this gauze around this pipe?

Ans. I got this first gauze put around the pipe the first of August, sixty-six, but I am not certain whether this same man did it or not.

Int. Who did do it, if not this same man?

Ans. I think I put on the first wire-gauze myself, but I think I had some soldered on the same day.

Int. Soldered on by whom?

Ans. I cannot give the name of the other firm in the tin business, nor I cannot recollect which shop I got the work done at.

Int. Was it done at one of the tin-shops in Eddyville?

Ans. Yes, sir.

Int. Did you make any changes in the well-tubes, in respect to the gauze, after the first experiment?

Ans. I perfected my well-tube from time to time. I always kept the screen on the outside of the tube, over the perforated holes.

Int. Up to what time did you continue perfecting your well-tube?

Ans. I think I had all the material parts completed by about the thirteenth of August, sixty-six, except the air-passage.

Int. When did you adopt the arrangement for the air-passage?

Ans. I conceived the idea of the air-passage some time that summer, but I do not recollect the exact date.

66 Int. When did you first use a well-point containing the air-passage?

Ans. I don't recollect; it was either that fall or the next spring.

Int. Who made the first point with the air-passage in it?

Ans. I think I put the first air-passage in the point.

Int. At what place?

Ans. I can't recollect when or where.

Int. Was that air-passage an invention of your own or was it suggested to you by some one else?

Ans. It was my own idea entirely.

Int. When did you first apply for your patent?

Ans. I don't recollect the exact date, but I think it was March or April, sixty-seven. It might have been as early as February.

Int. Did you sign the specifications prepared by Munn & Company as early as that?

Ans. I don't recollect; it might have been some later than that.

Int. Do you know both members of the firm of L. M. Rumsey & Company?

Ans. I think I do know both.

Int. Was it either of those men that called on you at Eddyville as agent of their house?

Ans. I think not.

Int. Don't your letters-patent bear date the same day on which you made affidavit in connection with your application for the patent?

Ans. They do not.

Int. Before whom did you make that affidavit?

Ans. To the best of my recollection it was Henry M. Clement,
67 a notary public, at Eddyville, Iowa.

Int. What do you claim as your invention in connection with this well-tube?

Ans. I claim the combination arrangement of the perforated end of the well-tube, marked "A" in my patent, and around which a wire screen or gauze, marked "B," is placed a point, D, secured, forming the chamber E and air-passage G, as described in the specifications and drawings attached to my letters-patent, and making a part thereof.

Int. Don't you know that your letters-patent only claim the combination of the tube with the point in such a manner as to form the air-passage and nothing else?

Ans. I don't know any such thing.

Int. Don't you know that there is no claim in your patent for the screen or gauze?

Ans. I do not.

Int. Do you not know that there is no claim in your patent for the diameter of the point being greater than the diameter of the tube?

Ans. I do not.

Int. Describe the well-tubes which you allege in your bill that the defendants are manufacturing, and which you allege are infringements on your patent.

Ans. It is a well-tube made by perforating a piece of gas-pipe with holes to admit water, and placing a wire screen or gauze around the well-tube over the perforated holes to prevent the sand from entering the well-tube and thus being drawn through the tube and into
68 the pump; it also has a cast-iron point or drill-head secured to the end of the tube, which said point is larger in its main diameter than the tube, so that it will make or leave a hole in the ground when driven larger than the tube, thus forming a space or chamber

around the tube as the tube is driven into the ground, and thus protects the screen from being torn while driving by reason of the enlargement of the point.

Int. Have these tubes manufactured by the defendants the air-passage G and the chamber marked "E" in your letters-patent?

Ans. They have the chamber E, but not the air-passage G; not that I have seen.

Int. Will you describe the point which is attached to the well-tube which the defendants use?

Ans. It is made of cast iron with a chamber in the upper end of it to receive the well-tube in, made about one inch larger in its main diameter than the well-tube and is pointed. At the extreme point it forms a cross, taking an end-view of it.

Int. Did these points have the well-tubes inserted in them when you saw them?

Ans. Yes, sir.

Int. Was there a chamber left between the outer edge of the perforated tube and the inside of the hollow place in the point?

Ans. There was not.

Int. Did the tubes fit tightly into the point and leave no vacant space?

Ans. They did.

69 Int. Then, where was chamber E?

Ans. The tube was in it.

Int. Would there be any object in leaving a chamber or vacant space between the tube and the point without having also the air-passage G?

Ans. I think for all purposes and in all circumstances it would be better for the pipe not to be so tight in the point as to exclude water, although the air-passage was not used, though it being tight in the point would not hinder the working of the well in most kinds of soil, but there would be an advantage in the tubes being loose enough in the point for water to pass when operating in clayey or sticky soil.

Int. Tell us what the advantage would be.

Ans. In case the screen should get smeared over with clay or mud while driving the pipe or turning it in the ground there would be a better chance for the water to get to the inside of the tube in starting the pump.

Int. On the other hand, is there not danger that small gravel and sand and fine sand will find its way through this chamber and into the tube?

Ans. I never had any trouble in that way.

Int. Is not the principle purpose in leaving that chamber there at all that it may be used in connection with the air-passage?

Ans. No, sir; it is not the principle purpose.

Int. What is the principle purpose?

Ans. To put the tube in.

70 Int. Do you claim any invention for leaving a space between the outside of the tube and the point?

Ans. No, sir.

Int. Do you claim any invention for the air-passage G?

Ans. Yes, sir.

Int. Is the air-passage G of any service unless there is a space left between the outside of the tube and the point?

Ans. It is of just as much service as though there was a space there.

Int. In what way or for what purpose is it of service?

Ans. In case you drove down your tube in hard clay and wished to

withdraw it to save your tube in case you failed to get water, the air could pass out through the thickness of the point below its main diameter as the tube moved or passed up, and would thereby facilitate the drawing of the tube.

Int. Does the air-passage described in your patent enter the inside of the tube?

Ans. Yes, sir.

Int. Does it not enter the chamber between the outside of the tube and the point?

Ans. It enters the chamber in the point at its extreme lower end when the pipe rests on the bottom of the chamber in the point.

Int. What combination is it that you claim in this patent of yours?

Ans. I claim the combination and arrangement of the perforated end A of a well-tube around which a wire screen or gauze is placed, a point marked "D" secured, forming chamber E, and air-passage G,
71 as described in my specification and drawings attached to my letters-patent, and making a part of the same.

Int. Would the combination claimed in this patent be perfect without forming the air-passage G?

Ans. Yes.

Int. Would the combination be perfect without forming the chamber E?

Ans. I think it would.

Int. Would the combination be perfect without forming either the chamber E or the air-passage G?

Ans. I think it would.

Int. Would it be perfect without the point D?

Ans. I think not.

Int. Would it be perfect without the perforated end A of the well-tube?

Ans. I think not.

Int. What else besides the point D and the perforated end A is needed to make the combination perfect?

Ans. The wire-screen or gauze B.

Int. These three things must be combined so as to produce or form what in order to make your combination?

Ans. These three things combined as decribed in my specifications attached to the patent will produce a well-tube such as described in my specifications.

Int. Would any combination of these three things which form a well-tube be your combination?

Ans. Any combination of these three things for the same purpose that produced the same results would be, substantially, my combination.

72 Int. Don't your patent call for a combination of the perforated end A of the well-tube, point D secured at the end of said tube forming the chamber E, and the passage G, as set forth in your patent?

Ans. It don't call for that combination.

Int. What business are you engaged in now?

Ans. The drive-well business.

Int. Do you manufacture these well-tubes or points?

Ans. I have been manufacturing. I have the points cast. I usually put on the screws myself. The Kaw Valley Foundry, at Topeka, manufacture my points for me.

Int. Is there anything essential in the manner in which the gauze is fastened on the tube?

Ans. I think not.

Int. For whom did you sink the first well with the enlarged point?

Ans. I think it was for a man by the name of Phillips, on Third or Fourth street, in Eddyville. I think it was about two blocks west of Bridge street. This Phillips was called "Puss" Phillips, and at that time he was a clerk for John M. Fish. I sunk one that I know had a large point for A. P. Mantona, for the Star Mills, in Eddyville. I think my brother, J. R. Craig, was with me when I sunk this well for Montona.

Int. State, as near as you can, the time when you sunk this well at the Star Mills.

Ans. I can't recollect, but it was some time after I begun to fix wells good. It might have been the next spring or summer.

73 Int. Will you swear positively that you did sink a well with an enlarged point before you sunk the one for the Star Mills?

Ans. Yes, sir.

Int. When, where, and for whom did you sink it?

Ans. I sunk it on the thirteenth day of August, sixty-six, in the town of Eddyville, and to the best of my recollection for this man Phillips; if not for him it was in his immediate neighborhood.

Int. How do you know it was the thirteenth of August?

Ans. I am not quite positive it was that day; it may have been a day or two before or after, but it was about that time. I recollect it for it was the first time I discovered that the enlarged point would protect the screen while driving.

Int. Did you make any memorandum of the date at which you drove this well?

Ans. I had a memorandum.

Int. What memorandum did you make?

Ans. I think besides the books I made a special memorandum of this date.

Int. When did you make the memorandum; at the time or afterwards?

Ans. I think I made it shortly afterwards. It might have been a week, two weeks, or a month afterwards.

Int. In what did you make this special entry?

Ans. I think I made it in a little account-book.

Int. What was the entry made?

Ans. I made an entry of that date and what the discovery was.

Int. Can you remember any word in that entry? If so, state it.

74 Ans. The words were the time and date and what I discovered.

Int. Where is that book?

Ans. I don't know. I don't know what became of it; don't recollect when I saw it last.

Int. When was the last time you remember of seeing it?

Ans. Last time I remember of seeing it was three years or three years and a half ago.

Int. If this matter was important enough for you to make that entry, why was it not important enough for you to retain that entry?

Ans. After the facts became fixed in my mind it was not important enough to retain the memorandum.

Int. Are you positive that you sunk any well-point or points with enlarged point between the time that you sunk the well for Phillips and the time you sunk the one for the Star Mi.. ? If so, s a e when, where, and for whom.

Ans. I can only state to the best of my recollection that I sunk a number of wells with enlarged points, but I can't recollect for whom, but

generally in Eddyville. All the wells I sunk after the one I made the discovery on were wells or tubes with enlarged points.

Int. Out of this number that you sunk between the time of sinking one for Phillips and the time of sinking one for the Star Mills can you remember the name of a single person for whom one of them was sunk? If so, state it.

Ans. To the best of my recollection I sunk old Samnel Van Ness
75 one, and M'r Gish one, M'r John M. Fish one or two, D'r Fry one, and a number of *of* others; M'r Lappin was one also.

SAM F. CRAIG.

Sworn to and subscribed before me the fifth day of October, 1872.
[SEAL.] CHARLES H. CHAPIN,
Notary Public.

The said deponent, J. F. RABBITT, being first carefully examined, cautioned, and sworn to testify the whole truth and nothing but the truth, doth depose and say in answer to interrogatories on the part of the defendants:

Int. Where do you live, M'r Rabbitt?

Ans. In S't Louis, in the State of Missouri, at present. I have resided in S't Louis six or seven years.

Int. Have you had any acquaintance with well-tubes and well-points?

Ans. I have.

Int. For how long?

Ans. I think my first acquaintance with them was about the fall of the year eighteen hundred and sixty-six.

Int. What did you have to do them at that time?

Ans. I am a steam-fitter by trade, and made some myself about that time.

Int. Describe to us briefly the well-tubes you made about that time?

Ans. They were a piece of gas-pipe with holes drilled in it and a point attached to the end of the pipe with a pin. I used on the outside
76 perforated tin for a while, which answered the purpose very well in certain localities. We found out where there was the most demand for them the perforated tin would not answer. I then tried several things, and finally, late in the season, we found this wire gauze and tried it. I drove one covered with gauze, myself, into the quicksand to test it, and applied the pump to it to test it, and concluded it was just the thing needed, and went home satisfied.

Int. Did you make any more of them after that?

Ans. Yes, sir.

Int. Were any of them used that fall sinking wells?

Ans. There were some of them used, I do not know how many.

Int. Have you any well-tube with you similar in shape to those you made that fall? And if so, produce it.

Ans. I have one here.

(Witness here produces a well-tube marked "A" which made an exhibit and to be filed with these depositions and made a part thereof, said mark "A" being stamped in the iron.)

Int. How many or about how many well-tubes did you use with perforated tin before you commenced using wire gauze?

Ans. I can't say; I made them two or three, or three or four at a time, just as we had use for them.

Not being to complete the taking of said depositions by reason of the

want of sufficient time, I adjourn the further taking of them to to-morrow, then to be continued same place.

77 Pursuant to adjournment, as above stated, on the fifth day of October, A. D. 1872, at the office of Daniel Dillon, northeast corner of Third and Olive streets, in the city and county of S't Louis, and State of Missouri, I continued the taking of depositions as follows, viz:

Int. For what purpose did you use the perforated tin around the perforated well-tubes?

Ans. To keep the sand and gravel out.

Int. How did it answer that purpose?

Ans. It answered very well when the sand was not too fine.

Int. In the spring of sixty-seven was anything done by you in making these well-points; if so, to what extent, and how early in the spring did you begin?

Ans. I can't say exactly how early we did commence; it was quite cold yet; it was somewhere about March or the first of April, I believe, We had some patterns made and some well-tubes cast; I can't remember how many, but quite a number of them.

Int. State how these castings were made with reference to wrapping the perforated tube.

Ans. Well, it was a casting about sixteen or eighteen inches in length, bored out hollow, with slots in the sides, and it had projections at the top & bottom above and below the slots. It had a pointed point shaped something like an egg.

Int. For what purpose were these projections made above and below the slots?

78 Ans. As I understood, to leave a place for the screen and to prevent its being torn by gravel and stones in putting it down.

Int. That spring did you put a screen around those perforated tubes before using; and, if so, of what material?

Ans. Yes; we put a screen around them. Some of them were fine perforated tin, and some wire-gauze.

Int. In those well-tubes you made in the fall of sixty-six how did the greatest diameter of the point compare with the diameter of the pipe?

Ans. It was made a little larger.

Int. In the fall of sixty-six, in fastening the gauze or perforated tin around the tube, did you always use the same material? If so, state what it was; and if not, state what different kinds of material you did use.

Ans. I used the same kind all the time. I soldered the tin on and wrapped the wire-gauze with annealed wire.

Int. In the fall of sixty-six had you heard of Samuel F. Craig, or of his alleged invention?

Ans. I never had.

Int. When did you first hear of his alleged invention, or of him?

Ans. I never heard of him or his invention till some time along in the summer of sixty-seven. The first that I ever heard of him or his invention I received orders to make points after his invention. They were called Craig's points.

79 Int. Wherein did Craig's point differ from the points you had been making previous to that, if at all?

Ans. Craig's point, the way I made it, was one-inch gas-pipe, perforated at one end, with wire-gauze soldered over the perforations in the pipe, and a cast-iron point attached with a pin. There was a hole drilled in the point which, I believe, he called the air-passage.

Int. How did the size of the perforated end of this pipe compare with the chamber in the upper end of the point?

Ans. I should say that the chamber in the point was a little the longest.

Int. Who designed the patterns for the points made in the spring of sixty-seven?

Ans. I can't say exactly who did, but I think they were gotten up under the direction of a man by the name of Leach.

Int. For whom did you make the well-tubes you made in the fall of sixty-six?

Ans. I made them for Leach and other parties interested with him.

Int. For whom were those made which were made in the spring of sixty-seven?

Ans. The same parties.

Int. At what place were they made?

Ans. The castings were made at the Eagle Foundry, and the rest of the work was done at L. M. Rumsey & Company's.

Int. State whether or not, previous to receiving the order to make the Craig point, you had been making well-tubes to sell generally ac-
80 cording as you received orders for them from different parties; or, if not, for whom had you been making them, and to what extent?

Ans. I had been making a number of points, and they were used generally, but I do not know by whom and how they were sold.

Int. Who did the selling of them?

Ans. I believe they were sold through the firm of L. M. Rumsey & Company.

Int. Did you ever notice many of them in the store of L. M. Rumsey & Company?

Ans. I have seen a number of points there.

Int. When you received the order to make Craig's point did it strike you that there was any essential difference between that point and those you had been previously manufacturing; if so, what was it?

Ans. I can't say that I paid any attention to it; they were different in shape and differently constructed. Craig's point was different because he fitted his tube into the chamber in his point. His tube was drilled. The cast-iron points which I had been making was slotted in the casting of them, and the tube and point was all in one solid casting. I had made some wrought-iron points with gas-pipe tubing, and the point fastened inside of the tube. I never made, or saw any made, with a drilled hole in the bottom, except M'r Craig's.

Int. Fix, as near as you can, the earliest date in eighteen sixty-
81 six that you had any knowledge of these well-tubes.

Ans. I do not recollect exactly what time, but think it some time about the last of October.

Int. After you received that order to make Craig's point in eighteen sixty-seven, did you continue to made other points than Craig's with the wire-gauze screen and with the diameter of the points greater than that of the pipe?

Ans. Yes, sir, I did.

Cross-examination by the plaintiff's counsel:

Int. When did you first come to S't Louis?

Ans. In sixty-five.

Int. Have you remained here ever since that time?

Ans. Not quite all the time.

Int. When you left S't Louis where did you go, and how long did you remain before you returned?

Ans. I went to New Orleans in the winter of sixty-five, and returned to S't Louis in the spring of sixty-six; I think it was in March or April.

Int. Is this the only time you have been absent from S't Louis?

Ans. No, sir.

Int. When did you next leave, and where did you go, and how long did you remain?

Ans. I left, I think, in sixty-nine, and returned in March, seventy. I went to Mississippi that time. I have not been absent from the city any other time.

Int. While you have been in S't Louis what business have you been engaged in?

82 Ans. I have been engaged in several branches of business. I was first engaged in a saw-mill, then I had charge of men building a railroad, and was next employed in steam-fitting and manufacturing well-points. Afterwards I was engaged in the manufacture of lead pipe, in which business I am still engaged.

Int. When did you first commence working in the saw-mill, for whom, and how long did you work?

Ans. I think it was in June, sixty-six; I commenced working there for a man by the name of Hodgman. I think I continued in the mill till August or September of that year. The mill was situated on the corner of Fourteenth and Gratiot streets, in S't Louis.

Int. When did you commence working on the railroad, for whom, and how long did you work?

Ans. I think I commenced work on the railroad in September, sixty-six, for the same man, Hodgman, and I worked there till the latter part of October of that year.

Int. When did you commence working at the steam-fitting business, for whom, and how long did you work at that?

Ans. I went to work at that when I left the railroad, in October, for M'r Leach, and I continued to work for him till the fall of sixty-seven.

Int. Was M'r Leach carrying on business for himself?

Ans. Well, he had an interest, a patent well-point, or a right. I don't know exactly how he did have it. He was carrying this business for himself at that time.

83 Int. Was he carrying on any other business for himself at that time, except the pump business?

Ans. I do not know of any other business he was carrying on.

Int. Where was his place of business at that time?

Ans. In the store of L. M. Rumsey & Company.

Int. What kind of well-points was M'r Leach manufacturing at that time?

Ans. It was called the S't John's point, I believe. It was made under that head.

Int. How were those points constructed?

Ans. It was a cast-iron point with slots straight up and down, or nearly so, and, if I am not mistaken, he had a tube made of perforated tin that went inside the point to keep sand and gravel from going up through the tube.

Int. When did he have those points cast?

Ans. I never knew him to have any cast of that pattern.

Int. What was M'r Leach doing with those points after they were manufactured by him as explained.

Ans. He sold them, and had them driven about the country.

Int. Did you make sale of these points or drive any of them for M'r Leach; if so, when?

Ans. I never made sale of any, but helped drive them under his direction and orders. I helped drive one in the fall of sixty-six, and others in the spring and summer of sixty-seven.

Int. At what time in the fall of sixty-six did you drive this first well you were speaking of, and for whom?

84 Ans. It was some time about the last of November or first of December, for M'r Leach, as an experiment.

Int. This was the first one that you helped drive, was it?

Ans. Yes, sir.

Int. Did you drive it yourself, or did you have assistants?

Ans. I had assistants; there were three or four men in the party; all had a lick at it.

Int. Who were they?

Ans. M'r Leach and Gus De Grummond. I don't know the names of the others.

Int. At what particular place was this point driven?

Ans. It was over in Illinois, back of the transfer stable, on the edge of a slough. I should think it was about two miles from M'r Leach's place of business.

Int. Did you and M'r Leach and these other gentlemen go directly from M'r Leach's place of business in S't Louis to the place where this point was driven?

Ans. Yes, sir.

Int. For what purpose did you go there?

Ans. To test that point.

Int. What point?

Ans. The first point we put wire gauze on.

Int. What kind of a point was that that you put the wire gauze on?

Ans. It was a gas-pipe tube, with a *with a* wrought-iron point fastened in the bottom of the tube, covered with wire gauze.

Int. Was that the first time that you had put on the wire gauze, or screen, as you call it, to test it?

Ans. I think it was.

Int. Who made the point that you used at that time?

85 Ans. I did. A blacksmith made the extreme point, and I did the rest of it myself.

Int. Who was that blacksmith?

Ans. I never recollect hearing any name for him. He has a shop in an alley, either between Locust and Vine, or Olive and Locust, and Second & Third streets, in S't Louis.

Int. What is the given name of this man Leach that you were working for?

Ans. I think his name was Henry Leach.

Int. Where does he and August De Grummond now live?

Ans. I cannot say. I have not seen Leach since the fall of sixty-seven, and De Grummond since sixty-eight some time.

Int. What time did Leach quit business here, & what disposition, if any, did he make of his business here?

Ans. He left here in the fall of the year sixty-seven, and made over his business, in some way, to L. M. Rumsey & Company; I don't know how.

Int. Since he went out of business, in whose employ have you been?

Ans. L. M. Rumsey & Company's.

Int. After driving this point in Illinois, in connection with M'r Leach and others, what did you do with it?

Ans. Pulled it out and carried it back to the shop.

Int. What became of it afterwards?

Ans. I don't know what became of that particular one.

Int. Did you ever use it afterwards?

Ans. No, sir, I don't think I did.

86 Int. What time of day did you and M'r Leach use it over in Illinois?

Ans. It was late in the evening when we went over; it was nearly dusk when we got there.

Int. Was that the same point which you testified you drove yourself, in the night-time, the first time?

Ans. It was the same point I drove in connection with others. It was dark when we got through driving it; I consider that night.

Int. Why did you cross the river into Illinois for the purpose of testing this?

Ans. I don't know; only it was the most convenient place to test it.

Int. You say in your examination that after that you made more of them; how many did you make?

Ans. I don't recollect how many.

Int. Did you make any one?

Ans. Yes, I made some; I don't know how many.

Int. About how many?

Ans. About a dozen.

Int. What did you do with them?

Ans. I worked on them and left them in the shop in L. M. Rumsey's store.

Int. How long after driving this point in Illinois did you make the others spoken of?

Ans. I went to work the next day fixing them right along.

Int. What part of the work did you do?

Int. I cut the pipe and drilled the holes in it; put the threads on it and the screw. A blacksmith put the points in them.

Int. Who was the blacksmith who put the points in them?

87 Ans. I don't know who did that work.

Int. Did you see the points after they were put in?

Ans. Yes; they were brought back to the shop again.

Int. You say there were some of them used afterwards in sinking wells; how do you know that?

Ans. Leach had two men sinking wells, and they took points away.

Int. Do you know, of your own knowledge, of any of those points being used for the purpose of making wells?

Ans. No, not of my own knowledge.

Int. During this same time you were making points, spoken of by you, was M'r Leach making & using other points?

Ans. Not until spring; he made a different kind of a point in spring of the year.

Int. What kind was he using in the fall of the year sixty-six and winter of sixty-seven, if any?

Ans. He was using the wrought tube and iron point.

Int. What kind of screen was he using, if any?

Ans. Both gauze and perforated tin.

Int. During that time do you know, of your own knowledge, of his using any with a screen of wire gauze on?

Ans. I don't know that he used any that winter.

Int. What kind was he using during that time?

Ans. I don't know as he was using any. I made them, but I don't know that they were used.

(The latter part of the answer objected to by plaintiff's counsel as not being responsive to the question.)

Int. What kind did you make during that winter?

88 Ans. I made points from a piece of wrought-iron gas-pipe with holes drilled in it and a wrought-iron point in the end of it. It was similar to the one referred to heretofore in the testimony and marked "A."

Int. Were you working at this business making points all that winter?

Ans. No, sir.

Int. What were you doing the balance of the time?

Ans. After I got through making these points I ran in the streets at large.

Int. How long did it take you to get up these ten or twelve points you testified about before?

Ans. I don't know; I should say I fooled away about two weeks' time on them.

Int. Were these ten or twelve points made by you all that M'r Leach had made that winter?

Ans. All that I knew of.

Int. Where did you stay the balance of that winter?

Ans. I boarded on Fourteenth street near Cass avenue, with a man by the name of James Sewell.

Int. Who were those men who were putting in wells for M'r Leach that winter?

Ans. I don't know; they were Irish laborers. One went by the name of Columbia John, and the other was John Killian, or some similar name. I don't know where they are; I have not seen them since that winter. I don't know how long they were in Leach's employ.

Int. You say that afterwards, in the spring of sixty-seven, you made more of these points. About what time in the spring did you commence?

89 Ans. I commenced in the latter part of March.

Int. Did you use cast points in those you got up in the spring?

Ans. Yes, we used some cast points in the spring.

Int. When did you first get those cast points?

Ans. I believe it was in April.

Int. Where were they cast?

Ans. At the Eagle Foundry, in S't Louis.

Int. Who got up the patterns for those points?

Ans. I think M'r Leach had them made. I don't know where he got them made.

Int. Were those the first points that you had cast after this pattern?

Ans. The first that I know of.

Int. Who were those points got up for?

Ans. They were got up for M'r Leach. I presume he had it done.

Int. Did you make the tubes for the points that were cast in the spring?

Ans. The tube and point were all in one casting. I cut the gas-pipe and put it in shape to complete the well.

Int. Were these the first points that Leach had cast?

Ans. I don't know of any previous to them.

Not being able to complete the taking of said depositions, by reason

of the want of sufficient time, I hereby adjourn the further taking of said depositions till Monday, the seventh day of October, then to be continued at the same place mentioned in the annexed stipulations.

CHARLES H. CHAPIN, *N. P.*

90 Pursuant to the adjournment, as above stated, on the seventh of October, 1872, at the office of Daniel Dillon, northeast corner of Third and Olive streets, in the city & county of S't Louis, State of Missouri, I continued the taking of said depositions, as follows:

Int. You say in your testimony-in-chief that the well-tubes you made in the fall of sixty-six were made for M'r Leach and other parties interested with him. Will you state who these parties were?

Ans. I made them under the direction of M'r Leach. I can't say who the parties were that were interested with him, or how they were interested. I suppose the men that were working around with him were interested with him. I don't know how they were interested and in what way. I don't exactly what interest he held in it.

I was working in the spring of eighteen sixty-seven for M'r Leach. I did my business with him entirely. I don't know that any part' was interested with him, and I don't know what interest he had in it. The work was done that spring in M'r Rumsey's store. I believe that in the spring of sixty-seven M'r Leach supplied M'r Rumsey with what well-points or tubes he had orders for. Rumsey & Company's place of business was then at No. 610 North Second street. They occupied the three upper floors of the building; there was a grocery store on the lower floor. I commenced working for Leach about the last of

91 March or the first of April, sixty-seven. We at first made the same kind as the twelve before described, and afterwards we had some points cast combining the point and the tube together.

This was the first work I did for Leach after I boarded with M'r James Sewell. I made some; I don't know how many. I don't know whether they were in general use, except from the use M'r Leach and his parties made of them. My own knowledge is that they were driving them—Leach and his men. I saw them drive some that spring and summer. They had a wire-gauze screen on the wells they drove at that time. I saw them drive them in Illinois; but I do not know for whom. I saw several driven in Illinois. I helped drive two or three myself. I cannot name any person I drove for. I had some laboring men with me; I can't tell who they were. They were Irishmen, picked up for the occasion. I think there were two besides myself and M'r Leach. I don't remember whether the ones we drove were the cast-iron points or the others. I now remember that one of them was one of those iron tubes. On all that I drove at that time we used the wire-gauze screens. As near as I can judge, the wells that I drove at that time were at various points in Illinois. I should say about five miles from the city of S't Louis.

The points that I used at that time were similar to the one shown here and described in my testimony. The difference between the point or tube here and the ones formerly used consisted in using wire

92 gauze on the latter ones used and perforated tin on the ones used before. The perforated tin was used on the outside of the tube. The tube that you have described here, and is marked as an exhibit in your deposition, I picked up down at the shop of L. M. Rumsey & Company last Thursday, October third. I believe I brought it here at the instance of M'r Dillon, one of the attorneys for the defendants. It was

in the same condition it is now, with the exception of the gauze. I assisted in putting on the gauze. A man by the name of Thom. Killian, who works in Rumsey's shop, assisted me in putting on the gauze. I believe it was put on to bring here to exhibit, to show the kind we had previously used. M'r Dillon asked me to have it fixed in the manner we used to use them. With the exception of the wire-gauze screen it is in just the shape I found it in the shop. It had part of a perforated-tin screen on when I found it. The part of the tin screen on it was the same that had been used on it before. I had the tin screen cut off to put on this wire screen; this same Killian cut it off for me. I do not know who made that particular tube; it is wrought iron. I will not swear that is one I made there; it is so long since I made them. A boy working in the shop, called Billy, was present when we were fixing this tube. Neither of Mess'rs Rumseys were present. M'r Dillon asked M'r L. M. Rumsey to have one fixed up, and M'r Rumsey requested me to do it. M'r Rumsey did not ask or direct me to cut off the tin
93 screen. We were looking at one at the time that had no screen on, and it had been cut for some purpose or other; the end of it had been cut off. We hunted around in a pile of rubbish lying there, and found this other one, and fixed it up. M'r Rumsey directed me to fix the point and put the gauze on it.

Int. When and of whom did you receive directions to fill an order for well-tubes for M'r S. F. Craig?

Ans. I do not exactly remember whether I received that order through M'r Leach or M'r Rumsey, but I believe it was through M'r Leach's instructions. As near as I can recollect it was late in the summer of sixty-seven; it was somewhere about the last of August, I think.

I was directed to get the pipe ready, have the gauze put on and attached to the cast-iron point, and the point fastened on. I do not know who furnished the points. I think the points were in M'r Leach's charge. I think they were cast at the Eagle Foundry. I do not know that L. M. Rumsey & Company furnished those points. I do not know that L. M. Rumsey & Company, or either of them, gave directions about getting up these points. After the points were finished they were put in charge of M'r Rumsey's shipping clerk. I cannot say whether I received the order of Craig as early as June, eighteen sixty-seven. I can't say whether his order was filled as early as the first of August of that year; I cannot fix the time. At the time I was filling Craig's order I think I was boarding on Market street, at John Thurley's boarding-
94 house. He is still there, and his place is now number six hundred and sixteen. I went there to board in spring of sixty-seven, and have boarded there most of the time ever since. Immediately before that I boarded on Fourteenth street with M'r James Sewell. I think I was boarding with M'r Sewell at the time I was making the S't John's point for M'r Leach. I was boarding with him while I was making some of them, I know. When we were *were* filling M'r Craig's order we were at the same time making the S't John's point and various others. There were changes made in the S't John's point that spring and summer. I recollect only one; that was some time during the summer. It might have been in July or August; I could not say which. The change at that time was in the shape of the extreme point. We lengthened out the extreme point, and a shallow spiral groove was made around it. This was the only change that I remember. We might have increased the size of the diameter of the point. I do not remember whether we did so or not. My best impression is that it was increased a little. I

do not know what the change in the diameter was made for. I have an impression about it.

Int. What is that impression?

Ans. To more thoroughly protect the gauze or screen on the tube. After these changes in the S't John's tube we used both the wire-gauze and perforated-tin screens. I cannot state whether the change in the diameter of the S't John's patent was made before or after we
95 received the order of M'r Craig. It was after I commenced boarding on Market street. Before the enlargement of the diameter of this point I think we had points cast called the S't John's point. The point was shorter, had no grooves in it, and might have been less in diameter. It was changed by lengthening the point and making it sharper, grooving the sides spirally, and the diameter might have been enlarged. I am not positive whether the diameter of the tube was increased at the time the point was enlarged or not. I have no impression whether it was or was not.

The only difficulty I knew of in driving the old tube was that the perforations were too coarse to keep out the sand. I never saw one without a screen that was intended to be driven. I never saw any other kind of screen except perforated tin used before we used the wire gauze. They were all called S't John's points that were used before we tried the one wrapped with wire gauze, and after, too. I do not recollect of seeing more than one of the S't John's points made of cast iron before the spring of sixty-seven. The ones cast in the spring of sixty-seven were the ones made at the Eagle Foundry, and they are the only ones I know of that were cast. I can't tell how many were made before the change in shape was made. Those that I drove were made before the change was made. I drove some myself after the change was made. I
96 drove two or three of these out in Illinois along that fall, I should think in October. I went out with the men driving the wells and helped them occasionally. Leach was with us sometimes and sometimes he was not. He went out with us the time we drove these last two or three wells and showed us where to drive them, but did not remain with us. I don't recollect the names of any of these persons for whom we put in these two or three last wells. It was not in same place where we put in the others. I think one was in Columbia, Illinois, some twelve or fifteen miles from here. It was at a farm-house some half a mile southeast from Columbia, as it appears to me.

I commenced working for L. M. Rumsey and Company in the fall of sixty-seven, I think it was in November, and having been working for him ever since. It was about the time Leach went out of the business. My name is Frank Rabbitt, and people sometimes call me Frank and sometimes "Shoat."

Redirect examination:

I don't know why I am called "Shoat;" it is a name I have always had. I have never seen the original letters-patent of the S't John's patent.

(A certified official copy of the letters-patent of the S't John's drill-head is here shown the witness, the said letters-patent being dated January 9th, 1866, and No. 51,980.)

Int. Did you manufacture in the fall of eighteen hundred and
97 sixty-six any well-tubes or drill-heads similar to the one described in these letters-patent?

Ans. No, sir.

Int. Did you manufacture any in the spring or summer of eighteen hundred and sixty-seven precisely similar?

Ans. No, sir.

Int. Did you ever see any manufactured precisely similar to that patent?

Ans. No, sir.

Int. State wherein those manufactured by you in the spring and summer of sixty-seven differed from the one described in these letters-patent.

Ans. The size of the point below the slots was increased in diameter, and the head above the slots was also increased to the same extent. In the ones we made we put a screen on the outside over the slots.

Int. Previous to the time that you assisted in sinking the well over in Illinois late in the fall of sixty-six, and the tube for which was covered with wire gauze, had M'r Leach sunk any well-tubes; and, if so, were they covered with any gauze or screen; and, if so, of what kind?

Ans. To the best of my knowledge he had with perforated tin screens.

Int. Now tell what your knowledge consists of; tell us the whole extent of your knowledge.

Ans. My knowledge consists of their taking materials and men and going off to sink wells, and what I heard them say about it. They would take gas-pipe and points. The points they took I made, and they were covered with a screen when they took them away.

98 Int. Fix the earliest date to the best of your recollection when they took away any points that you had fixed for the purpose of sinking wells.

Ans. It was along in October, sixty-six.

Int. Have you at the shop any points similar to those you made in sixty-six before the screen was put on them?

Ans. There is part of one with the upper end cut off for some purpose.

Recross-examination:

I have no knowledge of my own that these wells were sunk in October, eighteen hundred and sixty-six. They took out points similar to those we have just been describing with perforated tin.

J. F. RABBITT.

Sworn to and subscribed before me this seventh day of October, A. D. 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

And the said deponent, L. M. RUMSEY, being first carefully examined, cautioned, and sworn to tell the truth, and the whole truth, and nothing but the truth, doth depose and say, in answer to interrogatories propounded on the part of the defendants, viz:

My name is Lewis M. Rumsey, of the city & county of S't Louis, and State of Missouri. My business is that of a merchant and manufacturer.

99 Int. Have you had any experience or acquaintance with well-tubes or well-points, and with the patents for the same; and, if so, to what extent?

Ans. The firm of which I am a member have manufactured well-points for about five years. I have taken out a patent myself in connection with W. P. Smith, and I have had occasion to inquire and investigate what was patentable on well-points, and the patents that have been issued.

Int. Have you seen the well-point or tube known as Craig's patent?

Ans. I am quite certain I have seen only one well-point that covered M'r Craig's patent.

Int. Have you seen M'r Craig's letters-patent?

Ans. I have.

Int. Have you examined them?

Ans. I have.

Int. Describe, as nearly as you can, the principle covered by that pa ent, if any.

Ans. M'r Craig claims and is allowed by the Patent-Office the combination of a well-tube with a point in such a manner that a perforation through the point shall admit of an air-passage from above through the point below the tube, in cases when the point is drawn out for the purpose of getting rid of the atmospheric pressure in extracting points. This is the only claim he makes in his patent-papers, and is the only one allowed by the Patent-Office. When the patent-papers speak of the perforated tube to which a screen is attached it is only for the
100 purpose of designating more particularly which is the tube that connects with the point. M'r Craig makes no claim to inventing a tube, the perforation of the tube, nor the attaching the same to the tube.

Int. Do you know, in this suit by M'r Craig against Smith & Hale, what he claims to be covered by his *his* patent, and which he claims has been infringed upon by them? If so, state it.

Ans. I have seen the complaint of M'r Craig against Smith & Hale. The two principle points that M'r Craig claims as infringements are the using the screen on the tube and a well-point larger than the tube.

Int. Are either of these claims actually covered by his letters-patent that you have seen?

Ans. The claim set forth by M'r Craig in his letters-patent does not ask to secure a patent on the screen, and does not mention the enlarged point. There is no claim for a patent on either the screen or the enlarged point, nor is he granted any patent in the papers on the screen or enlarged point. The description in patent-papers given to describe a completed machine always cover' much more than is allowed in a patent. All the Government allows to the applicant, if anything, is what is stated in his claim following the description of the complete machine.

Int. Would a well-tube constructed without any air-passage in the point, and without any chamber between the end of the tube and the point where the tube is inserted into the point, be an infringement upon M'r Craig's patent?

101 Ans. M'r Craig's patent covers only the air-passage down through the point, and no point constructed without that air-passage can be any infringement on M'r Craig's patent.

Int. At what date did you first see a well-tube the diameter of the point of which was greater than the diameter of the tube or pipe?

Ans. I saw them in the summer and fall of sixty-five. I saw them Courtland County, New York, at, I think, Homer and Courtland both, and I never saw a well-point that the point was not larger than the tube.

Int. When and where did you first see a well-tube with the end perforated and covered with a screen or gauze or anything of that character?

Ans. I saw well-tubes perforated in sixty-five. I do not remember at that time of seeing tin or gauze wrapped around them, but think they had tin or gauze pasted or soldered over the holes. I saw well-points in the fall and winter of eighteen hundred and sixty-six with screens on;

some of the screens were made of wire cloth, and some of the screens were made of perforated tin.

Cross-examination by plaintiff's counsel:

Int. What patent have you & W. P. Smith taken out?

Ans. Our patent is called Rumsey & Smith's patent well-tube.

Int. When did you obtain your letters-patent?

Ans. The letters-patent were issued June first, eighteen hundred and sixty-nine.

102 Int. Have you been manufacturing those points since the date of your letters-patent?

Ans. Yes, sir.

Int. Have you furnished any of those points to the defendants, as your agents, for sale?

Ans. Never as our agents. We may have sold them some, but I believe they manufactured their own point.

Int. Have you any other well-points manufactured known as Rumsey's well-tubes?

Ans. We have manufactured other shaped points, but don't know as they were called particularly Rumsey's points. Lately they have distinguished them as round points instead drill-points. They are nobody's patent.

Int. Have you sold to the defendants, Smith & Hale, well-tubes of any kind? If so, state the kind and when.

Ans. I do not know positively that we ever sold them a well-point, but would have sold them had they ordered them. If we have sold them any it may be either kind.

Int. Have you not, directly or indirectly, furnished them well-tubes to be used or sold by them?

Ans. If we have ever furnished them with any well-tubes we have sold them directly to them. I have no personal knowledge now of ever having sold them a well-tube. They could have received a great many from our house without my knowledge.

Int. Have you not, directly or indirectly, given permission to the defendants, Smith & Hale, to manufacture and use a well-tube known as Rumsey's patent, or Rumsey and Smith's patent?

103 Ans. I have no knowledge of ever having done so. If they have manufactured our patent well-tube they have done it without my knowledge, & the firm of L. M. Rumsey & Company, of which I am a member, has never received any remuneration therefor, nor have they contracted to allow them to manufacture for a remuneration, and I have no knowledge of any member of our firm giving them any permission to manufacture. I presume they were manufacturing the common round well-point, similar to the one manufactured by S. F. Craig, which is not covered by any patent.

Int. Have not the firm of L. M. Rumsey and Company, of which you are a member, some arrangements with the defendants, Smith and Hale, for the manufacture or sale of a well-tube?

Ans. Not to my knowledge.

Int. Have not the firm of L. M. Rumsey & Company aforesaid an arrangement with Smith & Hale, by which Rumsey & Company are to save themselves, Smith and Hale, from damages, costs, & expenses, by reason of the manufacture and sale of a well-tube, in case the same would be an infringement on any other patent?

Ans. We have never entered into any such arrangement with Mess'rs Smith & Hale, nor have we agreed at any time to bear any portion or

part of any costs or damages that might accrue to them, nor do we intend to, from the sale or use of our well-point, or any other.

104 Int. Have you not agreed with them, Smith & Hale, to be responsible for the expenses, costs, and damages in this suit, in case the plaintiff is successful?

Ans. We have not.

Int. Have you not, in this case, employed counsel to assist in the defence of this suit, and in the taking of these depositions?

Ans. We have neither employed or suggested counsel in this case.

Int. Has not the firm of L. M. Rumsey and Company written to Smith & Hale to that effect?

Ans. No, sir; not to my knowledge. If any such letter has been written no action has been taken on it.

Int. Has not yourself, or the firm of L. M. Rumsey and Company, since or before this suit was brought, written to Smith and Hale to the effect that you would be responsible for damages in case they got into difficulty on account of the sale of these well-tubes with S. F. Craig?

Ans. I am very positive that neither of the firm have ever written any such letter, and I know that both my partner and myself, neither of us, believe that we are bound, either verbally or in writing, to pay any costs or damages that may accrue to the defendants in their suit with S. F. Craig or any other party.

Int. Have you or your firm of L. M. Rumsey & Company agreed with Smith & Hale, by letter or otherwise, to furnish them the testimony in this cause?

Ans. I think that I wrote Messrs. Smith and Hale to the effect that S. F. Craig had no patents covering the claims he made against

105 them; and, even if he had, that they were not new inventions, and we had sufficient evidence here to show that they were in use long before his patent was issued.

Int. Is that all you wrote them?

Ans. I think wrote them in regard to M'r Craig's point—the point he was using was not patented—that he had abandoned his patent, and that all that was in his patent-papers was the air-passage in the point. This I knew from having seen his patent-papers in eighteen hundred and sixty-seven, and having seen the points in different parts of Kansas without having the air-passage.

Not being able to complete the taking of said depositions, by reason of the want of sufficient time, I adjourn the further taking of the same till to-morrow, then to be continued at the same place mentioned in the annexed stipulation.

CHARLES H. CHAPIN, *Notary Public.*

Pursuant to adjournment, as above stated, on the eighth day of October, A. D. 1872, at the office of Daniel Dillon, northeast corner of Third and Olive streets, in the city & county of S't Louis, and State of Missouri, I continued the taking of said depositions, as follows, viz:

Int. When did you give them this information?

Ans. I don't know the date. It must have been soon after the suit was commenced, as Mess'rs Smith and Hale sent usdown a copy of the claims made by M'r Craig, asking us, I think, what we knew about his patent. I wrote what I knew.

106 Int. When did you first see Craig's point?

Ans. It was either in the fall or summer of sixty-seven I first saw his patent-papers.

Int. Whence did you first have knowledge of his invention?

Ans. At the time we first saw his patent-papers.

Int. Did you not have knowledge long before you saw his patent-papers of his invention?

Ans. I had no positive knowledge of M'r Craig's invention till I saw his patent-papers.

Int. When did you first see his patent-papers, and who showed them to you?

Ans. I first saw his patent-papers in our office in S't Louis, 610 North Second street. M'r Craig himself showed them to us. This was the first time I saw M'r Craig, to my knowledge.

Int. Before seeing this patent, had not the firm of L. M. Rumsey & Company received orders from M'r Craig to manufacture his well-tubes?

Ans. Not to my knowledge; we might have received such orders.

Int. Previous to seeing these letters-patent did not the firm of L. M. Rumsey & Company have an order or orders from S. F. Craig to manufacture for him well-tubes?

Ans. As near as I can recollect, about a week before we saw him we supplied to him or his agents a few points, and I presume they were ordered by M'r Craig.

Int. Will you answer my question by saying yes or no?

Ans. I will when I can.

Int. Do you not know that the firm of L. M. Rumsey & Company did have such an order from S. F. Craig?

107 Ans. I have no knowledge of the order; presume we had one.

Int. Did not the firm of L. M. Rumsey & Company inform S. F. Craig that his order for well-tubes should be filled in a short time?

Ans. It is possible we may have done so. I don't know anything about it. We receive and fill some fifty or sixty orders a day, and write over hundred letters on an average a day, and I can't have knowledge of all of them.

Int. Did not you or the firm of L. M. Rumsey & Company, before you saw M'r Craig in S't Louis, inform him, by letter, that you had workmen there working on his order, and that the same would be filled in a few days?

Ans. I have no knowledge now of the contents of any letter we wrote M'r Craig at that time.

Int. Will look at that and say who wrote that? (Here a paper is handed to the witness by the plaintiff's counsel.)

Ans. Yes; that is the handwriting of Moses Rumsey, my brother. He was a member of the firm of L. M. Rumsey & Company at that time.

(The paper shown is marked "Exhibit Z" on the back, and endorsed "C. H. Chapin, notary public," and annexed hereto as an exhibit.)

Int. Did not the firm of L. M. Rumsey & Company afterwards, sometime in the month of August, eighteen hundred and sixty-seven, make a contract with S. F. Craig to manufacture well-tubes for him on a royalty?

Ans. We entered into a contract with S. F. Craig in regard
108 to well-points.

Int. Was a proposition of L. M. Rumsey & Company made to S. F. Craig in writing?

Ans. There was no proposition made in writing; there was an agreement made in writing.

Int. Did you not make a written proposition to S. F. Craig, in the

name of L. M. Rumsey & Company, to manufacture for him well-tubes or points on a royalty, and did you not sign the firm-name yourself?

Ans. I think I drew up the writing; am not positive whether it was in the shape of a proposition or an agreement; think it was an agreement; and, if I drew it up, I signed it myself.

(Here a paper is handed to the witness by the plaintiff's counsel, and marked "Exhibit Y," and annexed to and made a part of this deposition.)

The signature to the paper marked "Y" is my signature. I wrote the paper and signed it.

Int. Did you not, at the same time of making this agreement referred to, agree with S. F. Craig to have his name put upon the cast tubes or points manufactured for him?

Ans. I might have told M'r Craig we would do so; don't remember it.

Int. Examine that paper and see whose signature that is.

(Here a paper is shown the witness, Exhibit X, and annexed to and made a part of this deposition.)

Ans. That paper was written and signed by Moses Rumsey.

Int. When did you obtain your patent for well-tubes?

Ans. June first, eighteen hundred and sixty-nine.

109 Int. During the time you have been manufacturing well-points or tubes, who was your principle mechanic?

Ans. Herschel Lindeberger has superintended putting them together for the last three or four years. During that time they have been drilled and wrapped by various parties whose names I do not now know. Think before Lindeberger, Frank Rabbitt superintended putting some of them together.

Int. When did you first commence the manufacture of well-points?

Ans. Some time in the summer of sixty-seven; I do not remember the exact date.

Int. Who was your principle mechanic in sixty-seven, after you commenced manufacturing well-tubes?

Ans. I don't know who wrapped them; they were cast at a foundry and wrapped by some one in our employ.

Int. Was not M'r Henry Leach in your employ after you commenced manufacturing tubes in eighteen hundred and sixty-seven?

Ans. M'r Leach was never in our employ.

Int. Was he not in some way connected with you in the manufacture of well-tubes?

Ans. M'r Leach was never in company with us, or interested in any way with us, in the manufacture of well-tubes or any thing else. He occupied room in our building and worked on his own hook.

Int. Are you a mechanic or machinist by trade?

Ans. I am not by trade.

Int. Are you a well-driver by profession?

110 Ans. I never drove a well in my life.

Int. Are you a lawyer or counsellor by profession?

Ans. I am not.

Redirect examination:

Int. State, M'r Rumsey, how it happened that you went into this contract marked "Exhibit Y," and what were your reasons for doing so.

Ans. M'r Craig was desirous of collecting a royalty from all parties to whom he had sold his patent or to whom he was furnishing his point. He was to furnish the points for seven dollars apiece, we to ship them C. O. D. and allow him two dollars as commission. This contract was

given to cover that arrangement. We understood when we furnished the points that we were not bound to pay the two dollars as a royalty, because said points were covered by Craig's patent, but money as a commissioner to M'r Craig, who charged the seven dollars for all the points, that he might have the two dollars drawback. M'r Craig admitted to me, in my office, that his patent hinged on the air-hole. We both concluded that it was a damage to put it in, as it would fill with dirt as it was driving down. I don't remember ever having made or sold a well-point with the air-passage in, as described in Craig's patent.

Int. Describe the well-tube or point, the diameter of which was greater than the diameter of the tube or pipe, that you saw in the summer of sixty-five, in Courtland County, New York State, how many you
111 saw, as near as you can, and for what purpose they were used.

Ans. The well-points I saw were made by drilling small holes in a piece of gas-pipe and inserting a wrought-iron point in the end that was to enter the earth. The point was cone-shaped, the base of which, or the end having the greatest diameter, was attached to tube. The diameter of the point when it came in contact with the tube was from one-half to five-eighth' of an inch larger in diameter than the tube. Some were three-quarters of an inch in diameter larger than the tube. I saw dozens of them. They were used for making wells.

Recross-examination:

Int. How do you know these points were used for making wells?

Ans. The parties to whom I was furnishing pumps to attach to them said they were for that purpose, and showed me gas-pipe driven in the ground, with pump attached to it working, that they said had those points on, and also showed me points covered with mud and dirt that they had pulled out of the ground. I also heard a great many people talking about the driving of those well-tubes there.

Int. How do you know this point was pulled out of the ground?

Ans. I had no other evidence than that it appeared to have been pulled out of the ground, and was told it was pulled out.

Int. Do you know of your own knowledge that any of those
112 points were driven in the ground for the purpose of making a well?

Ans. I know the points we made for that purpose, & saw the drive-wells working there at that time.

Int. Of your own knowledge do you know that any of those points were driven for the purpose of making wells?

Ans No further than I stated above.

Int. Did you ever see one of those points driven?

Ans. I have seen some of the same kind of points driven.

Int. Did you ever see one of those points driven?

Ans. I don't remember now that I ever saw anybody drive those particular points I mentioned as having seen at Courtland.

Int. Is not all you know about these points being used for the purpose of making wells hearsay?

Ans. No, sir.

Int. What knowledge have you other than hearsay?

Ans. I have seen the well-points manufactured, furnished the pumps to go with them, seen the wells in operation.

Int. The wells that you saw in operation, did you see the points on the well-tubes at that time?

Ans. The wells being about sixteen feet deep, I could not see the points after they were driven.

Int. Did you see them at the time they were driven?

Ans. I did not.

Int. How can you swear that those points were on the well-tubes that you saw that were in operation?

Ans. I have not sworn to it.

113 Int. Do you know, then, of your own knowledge, that those points were used on the well-tubes of which you have stated you saw the wells in operation?

Ans. I did not see the points on the tubes in those wells in operation.

L. M. RUMSEY.

Sworn to and subscribed before me this eighth day of October, A. D. 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

I, Charles H. Chapin, a notary public in and for the county of S't Louis and State of Missouri, do certify that by agreement of counsel I caused the above-named deponent, S. F. Craig, who was present at the time and place mentioned in said caption, to be sworn and examined at request of the defendants' counsel; and also, I caused the aforenamed deponents, J. F. Rabbitt and L. M. Rumsey, to come before me at the time and place in said caption stated, because the said J. F. Rabbitt and said L. M. Rumsey both live at a greater distance than one hundred miles from the place of trial of said cause herein, as is stated, and I believe I did not cause any notice to be served on adverse party, because said depositions were taken by agreement of parties, signed by their respective attornies, which said agreement is hereto annexed.

And I further certify that said plaintiff, S. F. Craig, and his 114 counsel, Burnes, esq., were present during the taking of said depositions, and that the defendants in said cause were also present by Daniel Dillon, esq., their attorney.

And I further certify that said deponents were by me severally carefully examined, cautioned, and sworn then and there to testify the whole truth; that said depositions were wholly reduced to writing by me in the presence of said witnesses respectively, and that the several said deponents, then and there, in my presence, severally subscribed their names to their respective depositions; that I am not counsel or attorney for either party or interested in the result of said suit.

All of which is certified to said court as the cause wherefore these said depositions are taken, and for the manner in which it is done.

In testimony whereof I have hereto set my hand and affixed my notarial seal, this eighth day of October, A. D. 1872.

[SEAL.] CHARLES H. CHAPIN,
Notary Public.

Notarial fees:

To taking and certifying 197 folios, 20 cts	$39 40
[This part of the original is torn off and lost.]	1 00
	1 00
	$41 40

(Endorsed:) No. 1. No. 477. Samuel F. Craig vs. Smith & Hale. Depositions for defendents opened by written stipulation of counsel [lost] instance of pl'ff's att'y. Topeka, Nov. 13, 1872. A. S. Thomas, clerk.

115 *Replication.*

And on this day, to wit, November 23d, 1872, came the complainant, Samuel F. Craig, by his solicitors, and filed in the clerk's office of said court his replication to the answer of the defendants in said entitled cause; which replication, with the endorsements thereon, is in the words and figures following, to wit:

UNITED STATES OF AMERICA:

In the circuit court of the United States in and for the district of Kansas.—To the Nov. term, 1872.

SAMUEL F. CRAIGE
vs.
JACOB SMITH AND GEORGE D. HALE. } Replication.

The repliant, saving and reserving to himself now and at all times hereafter any and all manner of benefit and advantage of exception which may be had or taken to the manifold insufficiencies of the defendant's answer, for replication thereunto says that he will aver, maintain, and prove his declaration to be true, certain, and sufficient in law to be answered unto; and that the said answer of the said defendant is uncertain, untrue, and insufficient to be replied unto by this repliant; that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto, and not herein and hereby well and sufficiently replied unto, confessed, or avoided, traversed, or denied, is true; all which matters and things this
116 repliant is and will be ready to aver, maintain, and prove, as his honorable court shall direct; and humbly pray as in and by this declaration he has already prayed.

MARTIN, BURNS & CASE, &
ALFRED ENNIS,
Sol. for Pl'ff.

The defendants hereby consent to the filing of the written replication at this time, this the 19th day of November, A. D. 1872.

(Endorsed:) 477. Samuel F. Craig vs. Jacob Smith & George D. Hale. Replication. Filed Nov. 23, 1872. A. S. Thomas, clerk. Martin, Burns & Case & Alfred Ennis, att'ys for pl'ff.

Stipulation.

And on this day, to wit, December 3d, 1872, came the parties, plaintiff and defendant, by their respective solicitors, and filed in the clerk's office of said court their mutual stipulation in said entitled case; which stipulation, with the endorsements thereon, is in the words and figures following, to wit:

In the U. S. C. court for the district of Kansas.

SAM'L F. CRAIG, PL'FF,
vs.
SMITH & HALE, DEF'TS. } No. 477.

It is agreed between the attorneys for the plaintiff and the attorneys

for the defendants that the above case be submitted to the court at the present term of said court upon the evidence as now taken, with the exhibits, &c., and that the same be heard at chambers upon oral
117 or written agreements at such time as may suit the parties and the court between this time and the next term of this court. The hearing at chambers is to be before Judge Dillon, and none other.

DEC. 2, 1872.

MARTIN, BURNS & CASE,
Atty's for Pl'ff.
A. L. WILLIAMS,
Att'ys for Def'ts.

(Endorsed:) 477. U. S. C. court. Sam'l F. Craig vs. Smith & Hale. Stipulation. Filed Dec. 3, 1872. A. S. Thomas, clerk.

Journal entry.

At a term of the circuit court of the United States of America in and for the district of Kansas, begun and held at Topeka, in said district, on Monday, the twenty-fifth day of November, A. D. 1872—present, Hon. Mark W. Delahay and Hon. John F. Dillon, judges—the following proceedings, amongst others, were had, and appear of record in the words and figures following, to wit:

TUESDAY, *December 3rd*, 1872.

SAMUEL F. CRAIG
vs. } 477. In equity.
SMITH AND HALE.

Now comes the complainant herein, by Martins, Burns & Case, his solicitors, and the said defendants, by Williams & Hanback, their solicitors; and this cause, coming on to be heard, is submitted to the court as by stipulation on file upon the evidence and exhibits
118 now on file and taken in this case; and that the same be argued before Hon. John F. Dillon, judge of this court, at his chambers, at Davenport, Iowa, at such time, before the next term of this court, as may be agreed upon by the parties, either by oral or written arguments; and it is further ordered by the court that the injunction heretofore granted be continued in force.

Deposition on part of complainant.

And on this day, to wit, March 10th, 1873, a deposition on the part of the plaintiff in said entitled cause was received and filed in the clerk's office of said court; which deposition is in the words and figures following, to wit:

In the circuit court of the United States in and for the district of Kansas.

SAMUEL F. CRAIG
vs. } Bill in equity. For injunction.
JACOB SMITH AND GEORGE D. HALE.

It is hereby stipulated & agreed by and between the parties to the above-entitled suit that depositions of witnesses may be taken on behalf

of the said plaintiff on the 18th day of November, 1872, commencing at 9 o'clock a. m. of said day, and to continue until all of said depositions shall be taken, at the office of Alfred Ennis, esq., attorney-at-law, numbered 143, on Kansas avenue, in the city of Topeka, county of Shawnee, and State of Kansas, before William Hall Jenkins, a notary public
119 within and for said county and State, with like effect, in like manner, and with like power in said notary as if said depositions were taken in accordance with notice duly given and under authority of a commission and dedimus issued out of said court; and said depositions may be read at the trial of said suit, subject only to the objection as to relevancy or competency.

Witness our hands this 18th day of November, A. D. 1872.

MARTIN, BURNS & CASE, AND
ALFRED ENNIS,
Att'ys for Plaintiff.

A. L. WILLIAMS,
Att'y for Def't.

Depositions of witnesses taken before me, William Hall Jenkins, a notary public within and for the county of Shawnee, in the State of Kansas, on the eighteenth day of November, in the year 1872, commencing at the hour of nine o'clock a. m. of said day, and continued until all of said depositions were taken, at the office of Alfred Ennis, esq., attorney-at-law, numbered 143, on Kansas avenue, in the city of Topeka, county and State aforesaid, pursuant to the written agreement of the parties, hereunto annexed, to be read in evidence on behalf of the in an action pending in the circuit court of the United States in and for the district of Kansas, wherein Samuel F. Craig is plaintiff and Jacob Smith and George D. Hale are defendants, the said plaintiff being duly represented by Alfred Ennis, esq., his attorney, and the defendants by Williams and Hanback, their attorneys.

120 SAMUEL F. CRAIG, of lawful age, being by me first duly examined, cautioned, and sworn to testify the truth, the whole truth, and nothing but the truth, deposes and says, in answer to the several interrogatories propounded to him, as follows, to wit:

Interrogatory 1. What is your name, age, occupation, and place of residence?

Answer. Samuel F. Craig; 38 years; well-driver; Topeka, Kansas.

Int. 2. Are you acquainted with the parties to this suit? If so, how long have you known them respectively?

Ans. I am acquainted with them. I am the plaintiff. I have been acquainted with the defendants about three & one-half years.

Int. 3. Were you a citizen of the United States on the 9th day of June, A. D. 1866? If so, have you continued to be such up to the present time?

Ans. Yes, sir; I was, and have so continued.

Int. 4. State whether or not, on the 9th day of June, 1866, you invented or discovered an improvement in well-tubes.

Ans. I did not on that day.

Int. 5. State whether or not, at any time, you invented or discovered an improvement in well-tubes. If so, state what that time was.

Ans. I did. I think I first conceived the idea of the improvement about the 27th day of June, 1866. I put that idea in practice the first day of August, 1866. I completed the invention, except the air-passage, the 13th of August, 1866, as near as I can recollect.

Int. 6. State what that invention or improvement consisted of.

Ans. It consisted in attaching a wire screen around the well-
121 tube over the perforated holes, so as to keep the sand out. It also consisted in enlarging the point and in combining the two, for the purpose of protecting the wire screen while driving.

Int. 7. You refer to an air-passage connected with the improvement or invention. Now state when, if at all, such air-passage was applied to the improvement or combined with it.

Ans. I conceived the idea of the air-passage about the last of August or in September. I think it was in September, in the year 1866. I put it in practice some time that fall; I think it was in October. It might have been a little later, but I think it was in October, as near as I can recollect.

Int. 8. You will now state in what your invention or discovery consisted in October, 1866?

Ans. It consisted in the attachment of a wire screen or gauze around the well-tube, over the perforated holes in the well-tube, to keep the sand out. It also consisted in the enlargement of the point or drill-head and the combination and arrangement of the perforated end of the well-tube with the wire screen and an enlarged point, so the point would form a chamber or space around the well-tube as the well is driven into the ground, so that it will protect the screen or gauze from injury while driving. It also consisted in an air-passage out through the thickness of the side of the point of the well-tube below its enlargement.

Int. 9. You may now state what your invention or discovery was called.

122 Ans. It was called "an improved well-tube."

Int. 10. Have you one of your improved well-tubes with you? If so, please produce it.

Ans. I have.

(The witness here produced one of said well-tubes, which I have filed with this deposition as an exhibit hereto, the same having a paper attached thereto marked "Exhibit A," and signed by me for identification.—W'M HALL JENKINS, *Notary Public.*)

Int. 11. State whether or not you were the first and original discoverer or inventor of the improved well-tube, of which you have just made an exhibit.

Ans. I was.

Int. 12. State whether or not, at any time after you invented and discovered said improved well-tube, you made application for letters-patent to the same. If so, when and how did you make such application?

Ans. I did. It was in the spring of the year 1867; some time between the middle of February and the middle of May, 1867. The exact date I do not now recollect. I made oath that I was the first and original discoverer of the invention or improvement set forth; also, I paid into the Treasury of the United States thirty-five dollars; also, I presented a petition in writing to the Commissioner of Patents of the United States setting forth my desire to obtain an exclusive property in the said improvement, and praying that letters-patent for that purpose might be granted to me. I also delivered and filed in the office of the said Commissioner of Patents a written description of my improved well-tube, in such full, clear, and exact terms, avoiding prolixity, as to enable
123 any person skilled in the art to which said improvement apper-

tained, or with which it is most nearly connected, to make and use the same; and having, in the said description, fully explained the principle and the several modes in which I contemplated the application of that principle or character, by which said improved well-tube might be distinguished from other inventions, and having, in the said description, particularly specified and pointed out the improvement which I claimed as my own invention or discovery, I also accompanied the whole with duplicate drawings and written references, one of which drawings and written references was deposited in the said Patent-Office and the other of which was annexed to the letters-patent thereafter granted. The said description and drawings were duly signed by me, and duly attested by two witnesses, and were duly filed in the said Patent-Office. I also furnished the said Commissioner of Patents a model of said improved well-tube of convenient size to exhibit to advantage its several parts.

Int. 13. State whether or not, upon this application referred to having been made by you, letters-patent to said improved well-tube were granted to you; if so, when?

Ans. Yes; they were granted to me June 11th, 1867.

(Said letters-patent were here presented by the witness, and marked "Exhibit B" by me, with permission on the part of the said defendants that possession of the same may be retained by the said plaintiff.)

W'M HALL JENKINS, *N. P.*

124 Int. 14. State whether or not you are now, and were at the time of the commencement of your said action against the defendants, the owner of the said letters-patent and the rights secured thereby?

Ans. I am and was.

Int. 15. State whether you are now engaged in the manufacture and sale of your improved well-tube; if so, for how long have you been so engaged?

Ans. I am, and I have been engaged in it ever since I invented it.

Int. 16. State whether or not you have at any time up to the present given your permission or consent to the defendants to manufacture, sell, or use your improved well-tube or any other well-tube?

Ans. I have not.

Int. 17. State whether or not the well-tube invented, discovered, and patented by you is of general utility and valuable.

Ans. It is.

Int. 18. Are you acquainted with J. F. Rabbitt, now a resident of the city of S't Louis, in the State of Missouri? If so, when did you first make his acquaintance?

Ans. I am; I made his acquaintance about the 4th of October, 1872.

Int. 19. State whether or not, prior to the time you invented or discovered your said improved well-tube, you had any knowledge or information that the said J. F. Rabbit, or any other person, was making, selling, or using a well-tube with perforated end covered with a
125 wire screen or gauze, together with an enlarged point or drill-head, in principle similar to the well-tube invented and patented by you?

Ans. I had no knowledge of that kind concerning J. F. Rabbit or any other person.

Cross-examination:

Int. 1. Give, as near as you can, the precise date when you drove the well for the Star Mills, at Eddyville, in the State of Iowa?

Ans. As near as I can now remember, I think it was in September, 1866; it might have been a little earlier or it might have been a little later.

Int. 2. When you bought the "Ashdown & Gilpin" patent, did you procure from the parties of whom you purchased any well points or tubes?

Ans. I did.

Int. 3. Describe those well points or tubes?

Ans. They were made out of a piece of one-inch gas-pipe about two feet long, perforated with small holes in the sides, and were provided with a cast-iron plug in the lower end, with a shoulder on it, the outside of which was of the same diameter as the outside of the pipe.

Int. 4. What protection, if any, was there around the perforated holes of these well-tubes or any of them?

Ans. There wasn't any when I bought them.

Int. 5. Did you ever procure from those parties a point or well-tube having a wire screen or gauze or other protection around the perforated holes in the well-tube?

Ans. I did not.

Int. 6. How many well points or tubes of the kind covered by
126 your patent have you sold since the date of your patent?

Ans. I suppose I have sold altogether between 1,000 and 1,500.

Int. 7. What proportion of that number have had stamped or branded upon them any words or things to show that they were patented by you?

Ans. I couldn't say what proportion; I think all of them since the patent, except about 25 or 30.

Int. 8. How many well-points have you sold in the State of Kansas?

Ans. I should suppose between 600 and 1,000.

Int. 9. What proportion of them have branded upon them any words indicating the fact that you were the patentee thereof?

Ans. Well, probably one-fourth of them.

Int. 10. Have you such an one in your possession now?

Ans. No; I have one of the brands.

Int. 11. Can you give me the name of any person in the State of Kansas to whom you have sold a well-point so branded?

Ans. The King Bridge Manufacturing Company.

Int. 12. Who put that well in.

Ans. I did.

Int. 13. Now, I will ask you if all those which have been branded have been branded in the manner of those cast in the foundry at Topeka?

Ans. No, sir.

Int. 14. Give me the name of some man in the State of Kansas to whom you sold a well-tube branded with letters intimating that you were the patentee thereof, which was not cast at the Topeka Foundry?

Ans. Mathew Maxwell, Salina, Kansas; J. A. Cramer, of Sol-
127 omon City; George Scott, Wamego; H. P. or P. H. Woodward, of Perryville, Kansas.

Int. 15. Where were those last referred to cast?

Ans. Kimball Brothers, Lawrence, Kansas.

Int. 16. What proportion of the points you have sold in Kansas have had the air-chamber E, as described in your patent, in them?

Ans. There have not been any with an air-chamber E.

Int. 18. What proportion of them have had the air-passage G in them?

Ans. A very small portion of them; I don't think any since January

2d, 1868. I am not certain whether any at all. I think there has been some few.

Int. 18. What proportion of them have had the chamber E in them?

Ans. All of them would form the chamber E when driven.

Int. 19. What part of this model exhibited here to-day forms the chamber E?

Ans. The enlargement of the main diameter of the point forms the chamber E as it is driven.

Int. 20. With the exception of the air-passage G, is this (Exhibit A) a fair sample of the well-tubes manufactured and sold by you in Kansas?

Ans. Yes, sir.

Int. 21. When you say that these tubes or points have been branded, what do you mean?

Ans. I mean that around or upon the point or tube I placed a mark, by pasting a label thereon, with the following words printed upon such label, or in substance like the label hereto following:

128

AMERICAN WELL TUBE,
Patented June 11th, 1867.
Improved January 2nd, 1868.
S. F. Craig, patentee,
Lawrence, Kansas.

All were so marked except those cast at the foundry in Topeka, Kansas, which had words cast on them indicating that I was the patentee thereof.

Direct examination resumed:

Int. 1. You will explain what you mean to have understood by your answer to interrogatory 7 in the cross-examination.

Ans. I mean that 25 or 30 were sold without any brand or mark on them indicating they were patented, and that the greater number of well-tubes manufactured by me in Kansas were driven by myself and J. R. Craig and Y. S. Ingram, and the majority driven by us were not marked or branded on the well-tube itself, but those sold by us to other parties to drive, so far as I know, were all marked or labeled in some way, indicating they were patented. We had our wagons and boxes marked, indicating that our well-tube was patented.

S. F. CRAIG.

The formal certificate to the foregoing deposition is waived expressly by the said parties. I certify, however, that the above is the genuine signature of the witness, S. F. Craig, and that the deposition was taken as above set forth.

[SEAL.] W'M HALL JENKINS,
Notary Public.

129 Rec'd my fees, $10.00, of Sam'l F. Craig, pl'ff.
W'M HALL JENKINS,
Notary Public.

EXHIBIT W.—JOHN H. PUTMAN, *Examiner.*

(Endorsed:) No. 477. Samuel F. Craig vs. Smith & Hale. Deposition of Samuel F. Craig on behalf of pl'ff. Filed March 10, 1873. A. S. Thomas, clerk.

Journal entry.

At a term of the circuit court of the United States of America, in and

for the district of Kansas, begun and held at Leavenworth, in said district, on Monday, the second day of June, A. D. 1873, present Hon. Mark W. Delahay and Hon. John F. Dillon, judges, the following proceedings, amongst others, were had, and appear of record in the words and figures following, to wit:

THURSDAY, *June 5th*, 1873.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE, PARTNERS, doing business under the firm-name and style of Smith and Hale. } 477. In equity.

This cause having come on to be heard upon the bill of complaint herein, the answer thereto of the defendants, the replication of the complainant to such answer, and the proof, documentary and written,
130 taken and filed in said cause, and having been argued by counsel for the respective parties:

Now, therefore, on consideration thereof, it is ordered, adjudged, and decreed by the court as follows: That the letters-patent, No. 65648, granted and issued on the 11th day of June, 1867, to Samuel F. Craig, being the letters-patent referred to in the bill of complaint herein, are good and valid in law. That the said Samuel F. Craig was the first and original inventor and discoverer of a new and useful improvement in well-tubes, which improvement relates to those well-tubes which at one end are perforated and provided with a sharp point or drill-head, and which said improvement in its main and principal features consists in the attachment to the perforated sides of the well-tubes of a wire screen or gauze secured to the tube by soldering it at all points except where the perforations are; which screen or gauze prevents sand, dust, &c., from entering the well-tube through the perforations, and thus from being drawn up through the tube to the pump, to which much injury has heretofore resulted from the presence of sand, etc., when well-tubes were used having no protecting screen or gauze; also, in an enlarged point or drill-head to the well-tube, whereby many advantages are secured, such as that when the enlarged point or drill-head is driven through the ground a hole is produced larger than the perforated tube, thereby protecting the wire screen or gauze from being torn off or otherwise injured in sinking the tube; also, by reason of the enlarged hole
and the aid of an opening or air-chamber in the point or drill-
131 head below the enlarged diameter thereof, whereby the tube can be easily withdrawn if necessary, as described and claimed in said letters-patent and specifications attached thereto, and is the exclusive owner of said patent. That the said Jacob Smith & George D. Hale, partners, doing business under the firm-name of Smith & Hale, defendants herein, have infringed upon said letters-patent, and upon the exclusive rights of the complainant under the same; that is to say, by manufacturing, making, using, vending, and offering to vend to others, to be used throughout the United States, and specially in the State of Kansas, a well-tube, which in its main and principle features consists of a well-tube, which at one end is perforated, and having attached to the perforated sides thereof a wire screen or gauze to prevent the sand and dust from entering the tube through the perforations, together with an enlarged point or drill-head which, when driven through the ground, produces a larger hole than the tube thereof, thus protecting the said wire screen or gauze from being torn off or otherwise injured in sinking the

tube, which enables the tube to be withdrawn with ease if necessary, as charged in said bill of complaint.

And it is further ordered, adjudged, & decreed that the complainant have and recover the profits, gains, and advantages of and from the defendants, which the said defendants have received or made, or which have arisen or accrued to them from the infringement of said patent
132 by manufacturing, using, and vending of the said well-tubes above described since the 11th day of June, 1867. And it is further ordered, adjudged, and decreed by the court that the said complainant do recover of the said defendants his costs and charges and disbursements in this suit to be taxed. And it is further ordered, adjudged, and decreed by the court that it be referred to David Brier, a special master, residing in Topeka in this district, to ascertain and take and report to the court an account of the number of the well-tubes above described, as being infringements on the complainant's letters-patent, made by the said defendants, and also the number sold by said defendants, and also the gains, profits, and advantages which the said defendants have received, or which have arisen or accrued to them since the 11th day of June, 1867, from infringing the exclusive rights of the said complainant, by the manufacture, use, and sale of the said improvements patented in said letters-patent.

And it is further ordered, adjudged, and decreed that the complainant, on such accounting, have the right to cause an examination of the said defendants ore tenus or otherwise, and also the production of the books, vouchers, and documents of said defendants, and that the said defendants attend before said master for such purpose from time to time, as said master shall direct. And it is also further ordered, adjudged, and decreed by the court that a perpetual injunction be issued in
133 this suit against the defendants, restraining them, and each of them, their agents, clerks, servants, and all acting, claiming, or holding under or through them, from making, selling, or using, or in any manner disposing of, or offering to dispose of, an improved well-tube which in its main and principle features relates to those well-tubes which at one end are perforated and provided with a sharp point or drill-head, and which said improvement in its main and principle features consists in the attachment to the perforated sides of the well-tubes of a wire gauze, secured to the tube by soldering it at all points except where the perforations are, which screen or gauze prevents saud, dust, etc., from entering the well-tubes through the perforations, and thus from being drawn up through the tube to the pump, to which much injury has heretofore resulted from the presence of sand, etc., where well-tubes were used having no protecting screen or gauze; also in an enlarged point or drill-head to the well-tube, whereby many advantages are secured, such as that when the enlarged point or drill-head is driven through the ground a hole is produced larger than the perforated tube, thereby protecting the wire screen or gauze from being torn off or otherwise injured in sinking the tube; also by reason of the enlarged hole, together with or without the aid of an opening or air-chamber in the point or drill-head below the enlarged diameter thereof, whereby the tube can be easily withdrawn if necessary, as described and
134 claimed in the letters-patent of the United States of America, No. 65648, dated June 11, 1867, and especially from using, selling, or offering to sell the well-tubes described in complainant's bill as manufactured, used, and sold in violation of complainant's rights, which said letters-patent embrace the invention and improvements described in said letters-patent, and as prayed for in said bill of complaint.

Precipe for injunction.

And on this day, to wit, came the complainant, by his attorneys, and filed in the clerk's office of said court his precipe for perpetual injunction in the said-entitled case, which precipe is in the words and figures following, to wit:

In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG
vs. } No. In equity.
SMITH AND HALE.

Issue injunction in this case agreeable to the decree of the court. June 23, 1873.

MARTIN BURNS & CASE, AND
ALFRED ENNIS,
Att'ys for Pl'ff.

To A. S. THOMAS, *Clerk.*

(Endorsed:) 477. Samuel F. Craig vs. Smith & Hale. Præc. for perp'l inj.

Injunction.

And on this day, to wit, June 23d, 1873, the clerk of said court issued a perpetual injunction in the said-entitled case, directed to the said defendants, which said perpetual injunction, with the marshal's
135 return thereon, is in the words and figures folowing, to wit:

THE UNITED STATES OF AMERICA:

To Jacob Smith & George D. Hale, partners, doing business under the firm-name and style of Smith & Hale, and your clerks, attorneys, agents, servants, and workmen, greeting:

Whereas it has been represented to us in our circuit court of the United States for the district of Kansas, in the eighth circuit, on the part of Samuel F. Craig, complainant, that he has lately exhibited his bill of complaint in our said circuit court for the district of Kansas, against you, the said George D. Hale & Jacob Smith, to be relieved touching the matters therein complained of, in which bill it is stated, amongst other things, that you are combining & confederating with others to injure the said complainant, touching the matters set forth in the said bill, and that your actings and doings in the premises are contrary to equity and good conscience:

We therefore, in consideration thereof, and of the particular matters in the said bill set forth, do strictly command and perpetually enjoin you, the said Jacob Smith and George D. Hale, and the persons before mentioned, and each and every of you, under the pains and penalties which may fall upon you and each of you in case of disobedience, that you do absolutely desist and refrain from making, selling, or using, or in any manner disposing of, or offering to dispose of, an improved well-
136 tube which in its main and principle features relates to those well-tubes which at one end are perforated and provided with a sharp point or drill-head, and which said improvement in its main & principle features consists in the attachment to the perforated sides of

the well-tubes of a wire gauze secured to the tube by soldering it at all points, except where the perforations are; which screen or gauze prevents sand, dust, etc., from entering the well-tubes through the perforations and thus from being drawn up through the tube to the pump, to which much injury has heretofore resulted from the presence of sand, etc., where well-tubes were used having no protecting screen or gauze; also in an enlarged point or drill-head to the well-tube, whereby many advantages are secured, such as that when the enlarged point or drill-head is driven through the ground a hole is produced larger than the perforated tube, thereby protecting the wire screen or gauze from being torn off or otherwise injured in sinking the tube; also by reason of the enlarged hole, together with or without the aid of an opening or air-chamber in the point or drill-head below the enlarged diameter thereof, whereby the tube can be easily withdrawn if necessary, as described and claimed in the letters-patent of the United States of America, No. 65648, dated June 11, 1867, and especially from using, selling, or offering to sell the well-tubes described in complainant's bill as manufactured, used, and sold in violation of complainant's rights, which said letters-patent
137 embrace the invention and improvements described in said letters-patent and as prayed for in said bill of complaint.

Witness the honorable Nathan Clifford, presiding justice of the Supreme Court of the United States, at Topeka, in said district, this 23d day of June, A. D. 1873.

[SEAL.] A. S. THOMAS, *Clerk.*

(Endorsed:) 477. Samuel F. Craig vs. Smith & Hale. Perpetual injunction.

U. S. marshal's return.

DISTRICT OF KANSAS, *ss:*

Received the within writ of injunction June 25th, 1873, and executed the same at Topeka, Kansas, on the 30th day of June, 1873, by delivering to each of the within-named defendants, Jacob Smith and George D. Hale, partners as Smith and Hale, personally, a true and certified copy of the within writ of injunction with all the endorsements thereon.

W. S. TOUGH,
U. S. Marshal for the Dist. of Kansas,
By C. L. VANDERPOOL,
Deputy.

Marshal's fees:
For service of writ, two persons, $2 each..... $4 00

(Endorsed:) Filed July 2, 1873. A. S. Thomas, clerk.

138 *Special master's report.*

And on this day, to wit, December 2nd, A. D. 1873, came David Brier, special master, and filed in the clerk's office of said court his report and accompanying evidence in the said-entitled case, which report and evidence is in the words and figures following, to wit:

Circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEO. D. HALE. } In equity. No.

Special master's report.

To the honorable the circuit court of the United States for the district of Kansas:

In pursuance of a decretal order of reference made and entered by this court in the above-entitled cause of the 5th day of June, A. D. 1873, by which it was referred to me as special master to ascertain and take and report to this court an account of the number of well-tubes in the decree of said court, described as being infringements on the complainant's letters-patent made by the said defendants; also the number sold by them, also the gains, profits, and advantages which the said defendants have received, or which have arisen, or accrued to them since the 11th day of June, A. D. 1873, from infringing the exclusive rights of the said complainant by the manufacture, use, and sale of the said improvements patented in said letters-patent, together with damages,

139 I, David Brier, special master, to whom the matters aforesaid were referred, do respectfully report that I have been attended in such reference by the att'ys for complainant and also the att'ys for defendants, and have taken and examined the testimony offered on behalf of complainant and also that offered by defendants, which evidence taken is herewith returned with my report and a printed copy of the aforesaid decree attached thereto, and do find as follows:

1st. That defendants have sold 79 well-tubes described in the decree of the court since the 11th day of June, A. D. 1867, being infringements on the complainant's letters-patent.

2nd. That the defendants have realized a net profit of $1.00 on each well-tube so sold as aforesaid.

3d. I further find from the evidence that the complainant was in full enjoyment of all the privileges and benefits of said patent up to August, A. D. 1869, and had up till that time been making large sales and realizing large profits upon the sales of his said well-tubes; that he was selling the same previous to August, 1869, at a regular established price of $15.00 for each well-tube, and was realizing a net profit of $12.00 each, and that the complainant sustained a loss on the sales of the 79 well-tubes, sold by the defendants as aforesaid, of $12.00 each, as complainant was able to supply the demand for the same.

4th. I further find from the evidence that the complainant was

140 also engaged in the business of making and constructing wells with his patent well-tube, and was realizing large profits from said business; that he was realizing an average profit of $37.00 for each well up to about the 1st of January, 1870, at which time, on account of the said defendants selling the well-tubes described in complainant's said bill of complaint at a very low rate, the complainant was compelled to sell at a much lower rate than his regular established price for the same.

That complainant continued the business of making or constructing wells as aforesaid from that time, as aforesaid, up to the 1st of January, A. D. 1873, and during the time last aforesaid he put in 199 wells at an average loss of $8.41½ each.

I also further find from the evidence that the defendants were notified by the complainant in the spring of 1870 that they were infringing on his patent well-tube, and at the same time was also notified by complainant to desist from further selling well-tubes of the kind described in complainant's said bill of complaint.

Your commissioner would also report that complainant claims other and further damages than those reported by me by reason of the general injury to his said business; and it is established by defendants' testimony that they derived other profits than those realized on the sale of well-tubes alone, by reason of the sales of pumps and gas-pipe
141 and other materials for the construction of wells.

Commissioner further reports the defendant Hale gave every opportunity for inspection of his invoice and books, and assisted throughout, and the same were fully inspected by me with his aid. I found 78 points sold by defendant, but adopt the number given in defendant's own evidence.

Your commissioner is unable to arrive at or to ascertain any definite amount of profits from the sale of pumps and gas-pipe.

This commissioner reports and finds from the evidence that defendants were not actuated by malice towards the complainant, but by a mistaken opinion that his said patent was not valid.

All of which is respectfully submitted.

DAVID BRIER,
Special Commissioner.

Commissioner's fees, $24.51.

(Endorsed:) No. 477. Samuel F. Craig vs. Smith & Hale. Report of commissioner. Filed Dec. 2, 1873. A. S. Thomas, clerk.

142 *Evidence accompanying special master's report.*

In the circuit court of the United States, district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH & GEORGE D. HALE, PARTNERS as Smith & Hale. } No. 477.

The testimony of George D. Hale in the above, taken by David Brier, special commissioner, appointed, and on behalf of the complainant, on the 3d day of October, A. D. 1873, between the hours of 9 o'clock a. m. and 4 o'clock p. m. of said day, & by the defendant on the 18th day of November, A. D. 1873, defendant George D. Hale & his att'ys, Guthrie & Brown, being present, and complainant & Col. Burns being both present, and all at each time, the witness being by me duly sworn at each examination.

OCTOBER 3d, 1873.

George D. HALE, one of the defendants in the above cause, being called by the complainant and duly sworn, deposes and says in answer to interrogatories:

Int. 1st. Are you one of the defendants in the cause of Sam'l F. Craig vs. Smith & Hale?

Ans. I am.

Int. 2. When was the copartnership of Smith & Hale formed?

Ans. March 5th, A. D. 1869.

Int. 3. Where has the firm been doing business, and what business?

Ans. Hardware, stoves, &c., 159 Kansas avenue, Topeka, Kansas, and still in same business.

143 Int. 4. Previous to and up to the 2d day of February, 1872, did the firm of Smith & Hale keep on hand for sale well-tubes?

Ans. We did mostly; sometimes we were out of tubes.

Int. 5. Describe these well-tubes.

Ans. Most of those by us sold were known as Rumsey's and were made of a piece of gas-pipe, with perforated holes covered with wire-gauze & the gauze wrapped with wire & had a point attached to the tube thicker in the main diameter, larger than the tube, & had four flanges at the point, and these chiselled sharp.

Int. 6. When did the firm of Smith & Hale commence selling well-points?

Ans. About the first of August, A. D. 1869, I think.

Int. 7. What No. of well-points, with a screw on the outside, did the firm of Smith & Hale sell up to the 2d day of February, A. D. 1872?

Ans. We have sold up to this time in all 79; up to the date we used for forty-five.

Int. 8. State whether in a copy of the North Topeka Times, date June 29th, 1871, & now shown to witness, headed the drive-well, & signed W. & B. Douglass, was seen by you at or about that time?

Ans. Yes, I read the article at the time.

Int. 9. Previous to the time you saw this article in the North Topeka Times, did you see it in the form of a circular?

Ans. I did.

Int. 10. State whether or not you did yourself, or the firm of Smith & Hale, procure this article, or cause the same to be published in the

144 North Topeka Times at or before the 29th June, 1871?

(Question objected to.)

Ans. I procured the insertion of the article in said paper at or before the time specified.

Int. 11. How long did you direct its publication in said paper?

Ans. My recollection is I ordered it for three months, & I know it was published longer than I paid for.

Int. 12. Have you stated the sale of all the well-tubes sold by Smith & Hale, with screen on the outside & enlarged iron point?

Ans. I do not remember of any others, except some bought & returned.

(The article in the North Topeka Times is hereto annexed, marked "A.")

Cross-interrogatories by defendants' counsel:

Int. 1. State when it was you first saw the circular marked "A."

Ans. I must have seen it months, or perhaps a year, before June, 1871, when it was published.

Int. 2. In whose possession were these circulars, and who put them first in circulation?

Ans. Douglass sent them to us; also Rumsey & Co., and Backnell, I think, & Carner. I do not certainly of others; to the best of my knowledge they were in the hands of pumps were here.

Int. 3. State now whether or not there was not a counter circular published in the North Topeka Times, with Craig, pl'ff's, name appended, at the same time the Douglass circular was published?

Ans. Yes, there was side by side, but Craig's was not published for a time after the Douglass, & both stood in the same paper for some time side by side.

145 Int. 4. What well-points did you sell, and from whom were they bought?

I bought of Rumsey & Co. Bignall's point, & Cowing's, & none others complainants wants.

Int. 5. You may describe all the pump-points you sold.

Ans. I have described the one from Rumsey. The Bignall point is composed of gas-pipe, perforated by 4 rows of holes, each hole covered with a square patch of wire-gauze soldered on, & at the lower end, & attached to the pipe, a cast-iron point; diameter of the point when attached to the point larger than the pipe. The Carner point is the same as Bignall's, except that the wire-gauze is a sleeve of wire-cloth or gauze around the whole instead of square patches on each hole.

Int. 6. State whether or not any of the points sold by Smith & Hale, or purchased by them, had attached to them, or the combination of the different parts thereof, what is known as an air-passage or air-chamber.

Ans. No, I never saw but one such, & it brought into court on trial of this cause, & brought in by Craig, complainant.

Int. 7. State what profits the firm of Smith & Hale have realized from the sale of concerning which you have testified.

(Objected to by pl'ff.)

Ans. It would not exceed, on an average, one dollar per point.

146 Int. Has the firm of Smith & Hale realized any other profits from the sale of well-points, directly or indirectly?

(Objected to by complainant.)

Ans. Nothing by way of drawback & commission, but only by sale, or by selling, perhaps, or other goods.

GEORGE D. HALE.

A.—THE DRIVE-WELL.

There probably never has been a more bold and daring attempt to perpetrate robbery & levy black-mail on the people of the country in the exercise of their most common and civil household rights, than in the iniquitous attempt now being put forth by certain interested parties to blind the eyes of the public by claiming that the drive-well is of recent invention and that the right to use the same is covered by a patent obtained by one Green in 1868, and in his or his agents prowling around the country among honest, well-meaning citizens who have the above well in use, and threatening vengeance on them if they do not launch forth a certain sum (usually five dollars) or be subjected to prosecution, which most men, rather than have a quarrel and put to the expense of litigation, will pay the sum demanded as black-mail, thus buying a peace and ridding themselves of the swindler and robber, who is allowed to continue on his villianous course unwhipped of justice, seizing upon his next innocent prey to repeat his vile practice on honest, unoffending citizens.

147 We deem it, therefore, a duty which we owe to the public, as well as ourselves, to inform them of the swindle and robbery being practised upon them by these false pretenders as to their patent claims, and to assure the public that this drive-well principle is an old device, not covered by any patent, having been known and in public use for the last half century in this country and years before in Europe, and any claim to sustain a patent on putting down a well by first driving down a rod and removing it and inserting a pipe to obtain water from the earth is simply ridiculous, and can no more be sustained than can the right to the principle of using the crowbar in the common way of making a hole in the ground in setting up bean-poles in one's garden.

In Mackenzie's Book of 5,000 Receipts, reprinted from the London edition by James Kay, j'r, & Brother, in Philadelphia, in 1829, will be found, on page 388, a full description of the drive-well under the head of "to raise water in all situations;" thus showing that the idea of making a well by driving down an iron rod into the ground and removing it and inserting an iron pipe in the hole thus made, and so forming a well, is much older than the person or persons who are falsely claiming to have invented the idea and perpetrating their great swindle on the public.

All that is necessary is to meet these robbers and dare them to prosecute. Follow them up and they will sneak away, not daring to come to an honest investigation and trial. They have just been put
148 to test in a case at Howell, Livingston County, Michigan, where they undertook to collect bonus of Hackett & Angel for the use of the drive-well, but H. & A., knowing their rights and daring to defend them, stood trial.

The suit came off at Detroit, Aug. 14, 1869. Green's counsel, on being called upon to give good bail, threw up the case, and the judge dismissed the case and threw the cost upon Green, they not daring to come to trial, knowing that judgement would be rendered against their patent, and thus their swindle would be more fully exposed and speedily brought to an end. Also, Green, or his representatives, let another case at Grand Rapids go by default.

It is unnecessary for us to spend time or space in adducing evidence as to the absurdity and worthlessness of Green's claim to the right of patent on the principle of putting down drive-wells by the old and common process of forcing down a bar of iron into the ground and inserting a pipe in place of it, or driving down the pipe with a point on the end of the same, thus making its own opening and passage-way in the ground, without the previous insertion of iron rod. Either of these processes are old and common devices, and have been public property for generations. And we caution any man against daring to collect or attempt to collect royalty or bonus of any person or persons who are using drive-well pumps of our manufacture. Should any person
149 have the audacity to threaten or in any way attempt to intimidate or hinder or prevent any person in the purchase or use of our drive-well pumps by demanding pay as bonus or royalty for use of the principle, we will esteem it a favor if they will send at once for a sheriff or other proper officer and have such offending imposter at once arrested and brought to justice; and if they will stand a trial before the courts we are ready to furnish the necessary means to carry forward the case for trial before the proper tribunal of our country, as we will not longer see our customers imposed upon, swindled, and persecuted by any set of prowling black-mailers roaming among honest, unoffending citizens.

We have the honor of having devised and made the first improved style of drive-well pump which was brought into general use in this country and in Europe, which met with such favor from the English government that we furnished for them their whole and extensive supply for the use of their Abyssinian army, where they were so highly prized and frequently spoken of, complimented, and illustrated by the English army correspondents, as can be seen by referring to numbers of the London Illustrated News, published during the war in Abyssinia.

In our visit to the annual fair of the Royal Agricultural Society of England, at Leicester, England, in July, 1868, we were interested
150 to find our pum's held up there as the model Abyssinia drive-well pump, and an English manufacturer of pumps, anxious to palm off his pumps, had driven a well near his stand at the exhibition and

applied a pump, which he kept a man working, to show the passing crowd of visitors the nice operation of the article. But, unfortunately for him, on close inspection, we found that the pump thus in use, as a sample, was none other than one of our "Douglas pumps," of our own manufacture, with our name carefully cut off and painted over, so as nicely to deceive any person but the one with the clear discernment of the maker's eye. This, of course, on being exposed, gave the palm to ours, (the "Douglas pump.")

We sold these drive-well pumps for years in this country before Green thought or moved in the matter of getting a patent on the same. Really, there 'ever was a more audacious and bold attempt to swindle and rob the people of their natural and commonest right to the use of a most simple yet necessary domestic appliance, and any one who will aid in bringing such imposition and fraud to a speedy exposure and the bar of justice, will confer a great and lasting public blessing.

In conclusion, we beg to offer to our numerous friends and customers, in addition to the best style of drive-well pumps, the largest variety and assortment of nearly every conceivable style and kind of pump, hydraulic rams, garden-engines, pump-chain, and other hydraulic machines in use. Our patent enameled pump is having a great run.

151 We claim to be the oldest and most extensive concern engaged in the manufacture of pumps in the world. We obtained the highest medal at the Universal Exposition at Paris, France, in 1867. Our works were founded in 1832.

We guarantee o'r prices and terms as favorable as any good responsible manufacturer in the United States.

Our goods can be found with most of the first-class houses in the line in every quarter of the globe.

Always enquire for the "Douglas pump." Send for descriptive catalogue and prices.

Orders from trade respectfully solicited at our factory at Middletown, Conn., or at either of our branch warehouses, 85 & 87 John street, New York; 197 Lake street, Chicago, Illinois.

W. & B. DOUGLAS.

B. DOUGLAS, *President.*
J. M. DOUGLAS, *Sec. & Treas.*
MIDDLETOWN, CONN., *March*, 1870.

NOVEMBER 18TH, 1873.—Came the parties in the case of Samuel F. Craig vs. Smith & Hale, and GEORGE D. HALE, being heretofore sworn, was introduced by defendant & was examined as follows:

Int. 1. Are you a member of the firm of Smith & Hale, defendants?

Ans. Yes, I am.

Int. 2. How long has the firm of Smith & Hale been engaged

152 in business, & in what kind of business have they been engaged?

Ans. Engaged in business at 159 Kansas avenue, city of Topeka, & since March 5th, 1869, hardware, tinware, agricultural implements, &c., &c.

Int. 3. What proportion of your business consisted in the sale of drive-well points?

Ans. We never sold $500.00 worth of well points, while our whole sales amounted from 60 to 90 thousand dollars per year.

Int. 4. State what effort, if any, were made by the firm of Smith & Hale to prevent complainant Craig from selling or disposing of his well-points?

Ans. Not any, unless the putting of that advertisement in the North Topeka Times can be so considered, and that we done in self-defence.

Int. 5. What efforts, if any, were made by the firm of Smith & Hale to sell or put upon the market the Rumsey or other points?

Ans. Less than in our other business, as we advertised our other stocks, but not the Rumsey points. The point business was so petty as to be overlooked, as compared to the other business; we kept them for the accom'odation of our customers.

Int. 6. You may state whether or not the firm of Smith & Hale used any efforts or influence with traders or others to influence them not to purchase or use Craig's point, or to induce them to purchase or use other points than Craig's.

Ans. Like other things, the price was the influence and inducement; we used no efforts, unless the distribution of the Douglass circu-
153 lars. I remember one, and may have given away 3 or 4 more.

Int. 7. State what you know, if anything, about these points having been on sale in Chicago & S't Louis during the continuance of the partnership of Smith & Hale.

(Objected to by plaintiff.)

Ans. They were regular articles of merchandise, made and sold by various manufacturers in different places in the Union, also were sold by our predecessors, Smith & Blake.

Int. 8. State whether or not any of the pump-points referred to, so far as your knowledge extends, or the points sold by Smith & Hale, had appended an air-passage or air-chamber in the point or drill-head below the enlarged diameter thereof.

(Objected to by pl'ff.)

Ans. Not one.

Int. 9. Had Smith of the firm of Smith & Hale anything to do with selling well-points or other stock of said firm?

Ans. No; I have had the sole management of the business since the firm started.

Cross-interrogatories by plaintiff:

Int. 1. You say that the price of these points was the influence and inducement for others to purchase points of you; was that all, the only inducement?

Ans. No; some people liked that better than Craig's, and some said Craig's point was worth nothing.

Int. 2. What price were you offering to sell these points to purchasers?

Ans. From $3.50 to $5.00, according to size and kind.

Int. 3. Did you not know, and had you not been notified by
154 Craig at the time you were offering to sell these points at $3.50 & $5.00 each, that you were infringing on his patent?

Ans. No, I did not know it, and never believed it; but he did tell me I was infringing on his patents, and he claimed a patent that I believe he never used since I have been in the business.

Int. 4. State whether or not Craig showed you his letters patent for a well-point; and, if so, was it not the same patent described in his bill of complaint against Smith & Hale?

Ans. He showed me some papers which I presume was his patent; but I did not read them, and attached no importance or value to them.

Int. 5. Did you not afterwards correspond with L. M. Rumsey & Co., of S't Louis, in which you stated to them that Craig claimed that in the sale of the Rumsey point you were infringing on his patent?

Ans. After I heard various reports, and after hearing from persons that Craig was threatening to sue us, which we did not believe, I did

inform Rumsey & Co. that Craig claimed we were infringing his patent & threatened to sue us.

Int. 6. Did you not receive a letter from L. M. Rumsey & Co. in reply to your letter saying in substance to you to go on and sell well-points, and pay no attention to Craig's claim, & that they would stand between you and all harm?

(Objected to by def't as incompetent.)

Ans. I do not recollect that they told us to go ahead & sell well-points, though it is quite possible they did; but they scouted the idea that
155 their well-point was an infringement of Craig's point, and agreed to pay any judgement that might be rendered against us, if such a judgement should ever be obtained against us for such infringement.

Int. 7. Was not this assurance given to you by L. M. Rumsey & Co. the main reason why you continued the sale of these well-points after learning that it was said to be an infringement of Craig's patent?

(Objected to by def't.)

Ans. No, it was not the main reason; it was an additional reason, perhaps; we should have contined to sell these points under the belief that no suit would be instituted.

Int. . What was your main reason for selling these points?

Ans. The same reason that applied to the sale of other merchandise; our customers asked for them.

Int. 9. After you ascertained or heard that Craig claimed a patent on these well-points did you get his permission to sell these points to your customers?

Ans. No; I would not have received it, if offered.

Int. 10. You state that these well-points are regular articles of merchandise made and sold by various manufacturers in different places in the Union; will you please state the name of any place where the well-points you have been selling were manufactured or sold as merchandise, of your own personal knowledge, & not as hearsay?

Ans. I never saw one made. I have bought them upon my order from parties who advertised them and got railroad receipts for the same from Chicago & S't Louis, and this is the extent of what I called
156 personal knowledge. I think I have bought them in person in S't Louis, but I am not certain.

Int. 11. You say you bought well-points in Chicago; what kind were they, and are they, or any of them, included in the 79 well-points sold by you as heretofore testified to?

Ans. They were known as the Bignall point, and are all included in the 79 points; there were about 7 of the Bignall points.

Int. 12. Was not a portion of the points you sold known as the S't John's patent?

Ans. No; I never heard of the S't John's points until now. If I ever sold any of them I did know that any such name was attached to them; if so, they embraced in the 79 points named in my evidence.

Re-examination by defendant:

Int. 1. You state that you sold these points from $3.50 to $5.00, according to their size and kind; what did you pay for the same, each?

(Objected to by def't.)

Ans. For Bignall's points we paid $1.87½ & $2.25, according to size; for the same points—Rumsey's points—$3.50 usually, occasionally $4.00, besides cost of freight & bonus on all points. The clear profits were from 75 cents to $1.50. I before stated what I thought the average profits.

(Objected to by pl'ff.)

By plaintiff:

Int. 1. How many different times did you purchase Bignall's points?

Ans. Twice; the first time I bought two points, & returned them; the second time one dozen, of which we still have on hands five.

157 Int. 2. You say the clear profits on the sale of these points was from 75 cents to $1.50 each; was this all the profits that Smith & Hale derived in the keeping and sale of the well-points in their business?

(Objected to by def't.)

. No; whenever the sale of a point was the cause of the sale of a pump & the gas-pipe that went with it, there was a profit on the sale of the pump and gas-pipe; and we usually sold the pump & gas-pipe with the point, but sometimes only the point, not a few alone to supply broken or loss of the points, and points were often lost by not being able to get them out of the ground when detached.

Int. 5. State whether or not the firm of Smith & Hale, since the commencement of this suit, have not sold a number of gas-pipes for the purpose of making a well, and at the same time, and to the same parties, sold a piece of gas-pipe of the proper length to put the holes in & the point on to make a well-tube.

Ans. I have no knowledge of any such thing being done, and I think it could not have been done without my knowledge; we often cut gas-pipe to any convenient length to suit buyers.

Int. 4. Did you not sell such gas-pipe as above described, since the commencement of this action, to W'm Shirley & Lewis Ogre?

Ans. I do not know about Lewis Ogre; my clerks informed me that they sold gas-pipe to W'm Shirley, and a pump, I think.

158 Int. 5. What knowledge have you, if any, of parties purchasing of you gas-pipe described in the question above, immediately after making the purchase taking this gas-pipe to the blacksmith-shop & having holes put in similar to Craig's patent, with wire-screen put over the holes and a point put in similar to the Craig point?

(Objected to by def't.)

Ans. The first and only knowledge of this kind that I have was some days after the conversation with Craig. S. R. Huffman, a blacksmith, now doing business on 5th street, Topeka, reported to me part of a conversation held with Craig, the complainant, about the right or the fact of Huffman to bore holes in a piece of gas-pipe. I knew nothing about whether he had bored it or not, nor how long the pipes were, nor whether it came from our store. I do not remember who he named, if any one.

GEO. D. HALE.

Defendant also offered as evidence the depositions of S. F. Craig & Rumsey & Rabbitt, as taken at S't Louis, so far as exhibits are concerned and the evidence therein applicable to said exhibits; which deposition is made part of this evidence.

I, David Brier, special commissioner in the above-entitled cause, hereby certify that the foregoing testimony of George D. Hale was by me written out on the days and times before mentioned in the caption, and the evidence was by the witness signed in my presence after being read to him.

In witness whereof I have hereto set my name this 20th day of November, A. D. 1873.

DAVID BRIER,
Special Commissioner.

159 Commissioner's fees:

30 folios	$4 50	
Swearing witness	10	
Certifying deposition	25	
2 days' services	10 00	
$\frac{1}{5}$ of evidence of Craig & Craig added to 5 cases	6 66	
	21 51	
Report of com	3 00	
		24 51
	24 51	

Rec'd of George D. Hale fifteen dollars on commissioner's fees, Nov. 6th, 1873.

DAVID BRIER,
Commissioner.

(Endorsed:) No. 474. Filed Dec. 2, 1873. A. S. Thomas, clerk.

160 In the circuit court of the U. S. for the district of Kansas.

SAMUEL F. CRAIG
vs.
A. J. BLAKE, STATES AND MORTON, SMITH & Hale, Dillizin M. Waite, and J. W. Brocket & Co. } Nos. 497, 521, 502, 545, 477.

The testimony of J. R. Craig, and S. F. Craig, complainant, taken in the city of Topeka on the 30th October, the 1st, 5th, and 6th days of November, A. D. 1873, and by consent of all the parties to the five suits above named, to be used and taken as evidence in each of said suits, said witnesses being called and sworn by the complainant, and were by me duly sworn to testify the truth, the whole truth, and nothing but the truth in each of the above five suits.

OCTOBER 30TH, 1873.

J. R. CRAIG, sworn to testify in the 5 causes of Sam'l F. Craig vs. J. W. Brockway & Co., States & Morton, Dillizin M. Waite, & Smith & Hale, & A. J. Blake, called by complainant, to interrogatories:

Int. 1. What is your name, age, residence, & business?

Ans. Name, J. R. Craig; age, 37 years; residence, Lawrence, Kansas; business, mercantile.

Int. 2. State whether or not you have been in the employ of Samuel F. Craig, the plaintiff. If so, how long, and in what business.

Ans. I have been in his employ; commenced in the spring of
161 1868, in Kansas; and was in his employ until the month of March, 1869, and was in the business of selling pumps & well-tubes.

Int. State what kind of well-tubes or points you have been selling for the plaintiff. And if patented, whose patent was it?

Ans. They were drive well-points. They were made with a tube perforated with holes, and the holes covered by a wire gauze or screen with an iron point enlarged beyond the size of the tube where it was attached to the same. The same were Samuel F. Craig's patent.

Int. State what the regular selling price of these well-tubes was each during the time you were so engaged.

(Objected to by defendants.)

Ans. The regular price was fifteen dollars per point.

Int. State what was the original cost of manufacturing these tubes & points so sold.

Ans. Two dollars and twenty-five cents each.

Cross-interrogatories by defendants:

Int. 1. You state that you were in the employment of the complainant from the spring of 1868 until March, 1869. What kind of business were you engaged in for him during that time?

Ans. I was engaged for him in the sale of pumps, well-tubes, points, gas-pipe, & keeping his books.

Int. 2. Were you exclusively engaged in this during all that time?

Ans. I was so engaged all that time.

Int. 3. Were you employed by plaintiff on a commission, on a salary, or as a partner?

(Objected to by plaintiff.)

Ans. There was no particular understanding or agreement
162 between us.

Int. 4. Did you receive any part of the proceeds of sales during the time as a compensation for your services?

(Objected to by plaintiff.)

Ans. I did at the end of my term of employment; we divided as nearly as we could by a rough guess equally, I getting one-half & he getting the other.

Int. 5. How much money did your sales come to during the time of your employment by plaintiff?

(Objected to by plaintiff.)

Ans. I think the sales were about two thousand dollars.

Int. 6. Does said $2,000.00 sales include all the business you did for the complainant during the time that you say you were engaged with him, from the spring of 1868 till March, A. D. 1869?

Ans. I suppose it would, about. The local trade I have no means of knowing about.

Int. 7. What proportion of the sales amounting to $2,000.00 was derived from the sale of drive well-points?

(Objected to by plaintiff.)

Ans. I do not know.

Int. 8. What property other than drive well-points was included in the sales of $2,000.00?

(Objected to by pl'ff.)

Ans. Pumps and gas-pipe.

Int. 9. What proportion of the $2,000.00 sales was composed of pumps & gas-pipe?

(Objected to by pl'ff.)

Ans. I think about 50 per cent. I think 50 per cent. were for well-points.

Int. 10. Will you please now state how many drive well-points you sold during the period of time you speak of?

(Objected to by pl'ff.)

163 Ans. I cannot say how many.

Int. 11. State to whom you sold these points during the time about which you have been testifying to; give names of persons to whom you sold, and the residence of each.

Ans. I do not know the name of each one; I will give what I can, viz: Mathew Maxwell, Salina, Kansas; J. F. Blatner & Co., Junction City, Kansas; J. A. Cramer, Solomon City, Kansas; George Trout, Wa-

mego, Kansas; H. P. Woodward, Perryville, Kansas; W'm Woodruff, Topeka; C. A. Pease, Lawrence; A. Storm, Lawrence; these are all I now remember.

Int. 12. What did you sell the point to Maxwell, at Salina, for, and how many did you sell to him?

Ans. I sold to him for $15.00 each, and sold a number, but I do not now remember how many.

Int. 13. Was Maxwell a trader or merchant, or did he purchase them for his own private use?

Ans. He was a trader, trading in them.

Int. 14. Do you wish to be understood as testifying that Maxwell paid you or agreed to pay you $15.00 each point, for the purpose of selling them again in the market?

Ans. I do.

Int. 15. State what was the cost of making these points at the manufactory?

Ans. Two dollars and twenty-five cents.

Int. 16. Upon what principle do you estimate the value of these points at $15.00 each, when the' cost $2.25?

Ans. From the fact that a well may be constructed by the
164 use of these points cheaper (paying this price for the points) than it can by the old plan of digging wells.

Int. 17. Are these points on sale and in use in the different States of the Union?

(Objected to by pl'ff.)

Ans. In some they are, and others I do not know about.

Int. 18. State, if you know, where any of the Craig points are on sale in any of the States or Territories of the Union, except the State of Kansas; state all you know on that subject.

(Objected to by the pl'ff.)

Ans. I do not know of any being on sale in any State but Kansas.

Int. 19. You and complainant have been ready and willing to furnish these points, or to license the manufacture & use of these points in the different States of the Union, have you not?

(Objected to by pl'ff.)

Ans. As to furnishing the points we are; as to hearing I cannot say.

Int. 20. What is the value of the royalty on these points?

Ans. Twelve dollars.

Int. 21. How long has the royalty been worth $12.00 on these points?

Ans. I think for about six years last past.

Int. 22. What was the royalty worth before this time you speak of, 6 years ago?

Ans. I do not know.

Int. 23. Was the royalty worth as much from the 11th of June, 1867, as has been since, beginning 6 years ago?

Ans. I suppose it was.

Int. 24. Did you reside at Eddyville, Iowa, in 1867, and were you connected with complainant in business in that year?

(Objected to by pl'ff as immaterial.)

165 Ans. I did, and was connected with him in business there.

Int. 25. What was the name or style of your firm at Eddyville, in the year A. D. 1867?

(Objected to by pl'ff.)

Ans. Craig & Brother or Frank Craig & Brother.

Int. 26. Is fifteen dollars the maximum or minimum price at which you & complainant have always sold these points?

Ans. That is the maximum price and the regular selling price.

Int. 27. What was your minimum price to the trade or for private purposes?

Ans. To the trade $15.00, for private purposes at the cost of manufacture. By private I mean to father, brother, brother-in-law, or if any point was lost or broke in driving, where full price had been paid, the person received another at cost.

Int. 28. Are these the only exceptions to the rule where $15.00 was charged per point?

Ans. No; under special contract sometimes a per cent., from 10 to 20 per cent., was deducted, where the person purchased a good many for their own use, &, for instance, the K. P. Railroad, where they took by the half-dozen for their own use.

J. R. CRAIG.

NOVEMBER 1ST, 1873.

SAMUEL F. CRAIG, the plaintiff in the above case, being called and duly sworn, deposeth and saith in answer to questions as follows:

Int. 1. When did you come to the State of Kansas?

Ans. In October, A. D. 1867.

Int. 2. Where have you lived since?

166 Ans. I lived in Lawrence until March, 1869; since that date in North Topeka, Kansas.

Int. 3. What has been your business since you came to Kansas?

Ans. Manufacturing and driving drive-wells & selling tubes and points. Two years of that time I had the selling of lightening-rods.

Int. 4. State the kind of drive-wells and tubes and points referred to.

Ans. The drive-wells were made with my patent well-tube, by driving the same into the ground until water is reached and attaching pump thereto. My well-tube is described in my patent No. 65648, issued June 11th, 1867, and described in my bill of complaint.

Int. 5. What number of these wells did you put in during the years 1868 & 1869, and years since?

Ans. From the time I came to Topeka, from March, 1869, to January, 1870, I put in 60 wells; from Jan'y 1st, 1870, to Jan'y 1st, '71, 80 wells; from Jan'y 1st, 1871, to Jan. 1st, 1872, 80 wells; from January 1st, 1872, to January, 1873, 37 wells; from January 1st, 1873, until the decision of the above causes, I did not sell or put in any that I remember of.

Int. 6. What was your price each for wells during the above time, and what your average profit at your price above named?

(Objected to by defendants.)

Ans. My regular price for a well complete was $1\frac{85}{100}$ per foot. My average profits, at my regular price, was about $42.00, less five dollars for Green's patent. I had a well-driver's contract from L. W.

167 Green, for which I was to pay him $5.00 per well royalty. This demand I paid to him by purchasing a lease on a territory for his patent as the original inventor and patentee of the drive-well, and I paid him $400.00 for the same.

Int. 7. How long were you able to sell at your regular price named above?

(Objected to by def'ts.)

Ans. Up to the spring of A. D. 1870, I think about the 20th day of March, the first trip I made in the country to put in wells I stopped at Silver Lake, at D'r Ward's store, & was shown by D'r Ward a circu-

lar posted on his store door, and was informed by him that it was given to him by Smith & Hale with request to post up and make it known, and t was the same circular published in the North Topeka Times and re-
ferred to by M'r Hale, defendant, in his testimony in my case vs. Smith & Hale, and this publication was shortly after that published in the North Topeka Times, & kept in the paper for a period of six months; and from said time, (March 20th, 1870,) I was met when I offered to sell by the remark that the person could obtain the well-tube and point from Smith and Hale for $5.00, and because they were kept at Smith & Hale's at that price, I could no longer sell at any regular price, & had to sell for whatever I could get from that, or I made the best effort I could to obtain regular prices but could not do so, being obliged from the condition of my business to continue it the best I could. I kept on and sold about 200 well-tubes up to Jan'y 1st, 1873, at an average loss of
168 $10.00 for each well-tube sold, that being the amount of the reduction on the price of my well-tubes caused by Smith and Hale keeping the same on sale at $5.00 each, in the place of $15.00 each, my regular price for selling the same. I remonstrated with M'r Hale, of said firm, and showed him my letters-patent & requested him and firm to desist from selling the same, but he refused to desist, and replied that L. M. Rumsey & Co. would back the firm in the sale of the said points and well-tubes, and would stand between them and myself on account of any infringement of my patent by Smith & Hale. The actings and doings of Smith & Hale, & their publication of said circular in the North Topeka Times, and their threats against me that they would slap my jaws if I offered to claim that I had a patent on this well-tube, & their frequent & persistent boasting that they would beat me and play me out, and that they could get evidence through L. M. Rumsey & Co., of S't Louis, to prove that I was not the inventor of this well-tube; these things caused a general distrust in the community that greatly injured my business, & it grew worse and worse until the spring of 1873, when I quit business entirely to wait the result of the suit.

(Whole answer objected to as immaterial and not responsive to question.)

Int. 8. What is your regular established price or royalty for the use of your patent well-tube & point?

(Objected to by defendant.)

Ans. Up to the spring of 1868 I had only license to manufac-
169 ture & furnish persons leasing territorial rights of me. This license was $2.00 each point, less 10 per cent. for collecting & remitting. In the spring of A. D. 1868, on account of the treachery & faithlessness of L. M. Rumsey & Co., of S't Louis, Mo., I deemed it expedient to change my plan of managing and disposing of my patent. I then determined to not lease any more territorial rights, but to manufacture my well-tubes and sell them at $15.00 each, or license any other persons whom I wished to do so to manufacture, use, & sell the well-tube for a royalty or license fee of $12.00 each. I have not changed that plan nor deviated from it till the present time, except when I thought I was compelled to do so, in order to make something out of it to sustain myself & family, when my well-tube was introduced or offered to be introduced by parties infringing having only a colorable invasion of my patent. I believe the use of my patent well-tube is worth twelve dollars, and I can realize that amount in their sale in the absence of infringements.

(Answer objected to.)

Int. 9. State whether you have sold or put in use any of your tubes and points at Wichita, Kansas; and, if so, by whom.

(Objected to by def'ts' att'y.)

Ans. I have allowed my father, William Craig, to use & sell well-tubes at Wichita for the last year and a half, and I allowed him to sell and put in pumps, he being infirm and old, without charging him any license, as on account of parties infringing my patent he could only obtain compensation for his material & labor without the price of the license for the use of the tube and point, he being willing to pay
170 the license as soon as I can stop the infringement of the patent. J. W. Brock & Co. & A. J. Blake, of Wichita, in not obeying the order of the court, I have not been able to stop the infringement of my patent then, they being encouraged not to do so by Smith & Hale, of Topeka, and others.

By consent of parties this examination is continued until the 5th day of November, A. D. 1873, at 9 o'clock a. m.

NOVEMBER 5TH, '73.

Cross-interrogatories:

Int. 1. In your examination-in-chief you assumed to give the number of wells put in by you from the time you came to Topeka, in March, A. D. 1869, to Jan'y 1st, 1873; state whether or not you are able to furnish a list of the names of the persons for whom you put in these wells, together with their residence and the price which each person paid you for each of these wells.

Ans. I have said list, & can furnish same except residences.

Int. 2. Will you please produce such list and attach the same to your deposition?

Ans. Yes; I here produce them, and they are hereto attached by the master, marked "A," "B," "C," & "D."

Int. 3. These exhibits do not show the residences of the different parties to whom you sold pumps during the time referred to in the last interrogatory; will you please, to the best of your ability, state the residence of these parties?

Ans. The most of them reside in Shawnee, some in Pottawattamie, and some in Jefferson Counties; this includes all the list.

171 Int. 4. Does these lists or exhibits show or indicate the true and accurate price which you received for well-points from the different parties therein indicated?

Ans. It does not show the price of the points separately, but shows the price obtained for the whole well.

Int. 5. What labor and material are included with the point in making up the estimate or price you received for each of these wells?

Ans. I aimed to put in the cost of material at a margin of about ten cents a foot above what it cost me on a close calculation. I bought the whole material at wholesale, including the point at the cost of manufacturing it.

Int. 6. In Exhibit B attached to your deposition it appears that you put in a well for the Coke & Gas Company sixty feet deep, for which you received ninety ($90) dollars. How much is included in this well for labor, gas-pipe, pump, or other material, including everything except the point?

Ans. In this well, the company having their own gas-pipe, wished to furnish it, and I made my calculation, allowing them fifty cents per foot for the material, and added to this $2.50 for the cost of manufac-

turing the point, rating the well at $1.50 per foot on account of not having to furnish a pump to complete the well. I did not furnish the pipe or the pump.

Int. 7. What did you furnish in this case for the Topeka Coke & Gas Company? State fully what you did furnish, and what you did.

172 Ans. I furnished my patent well-point & superintended in putting it in.

Int. 8. What did that point cost at the manufactory?

Ans. Two dollars and a quarter.

Int. 9. How long were you engaged superintending putting in this well?

Ans. I think I spent in putting in this well about two half days.

Int. 10. What was your services and other expenses expending in putting down this well reasonably worth?

Ans. Expense in Green's patent on the well; five dollars to clear the title on Green's patent; my services as an experienced hand was worth five dollars per day.

Int. 11. Have you now stated all the labor expended by you of the expenses incurred by you in putting down this well?

Ans. I have to the best of recollection.

Int. 12. You may now state whether or not it is not time that the exhibit made in your Exhibits A, B, C, and D, and attached to this deposition, with reference to the different parties to whom you claimed to have put in pumps from March, 1869, to January 1st, 1873, are not reckoned & calculated, and the figures set opposite each person's named, upon the same principle and mode of calculation as in the case of the Topeka Coke & Gas Company.

Ans. They are, except in the other cases, nearly or quite all of them. I furnished the material myself, but in this case of the Coke and

173 Gas Company, I made the calculation in order to arrive at what the actual loss was. I calculated the same as though it had been an ordinary one, such as I usually done where I furnished all the material and labor. In this case I charged the company with the material and then gave it credit for the same, in order to make *to make* my calculation.

Int. 13. Why did you calculate the profits upon this pump-point upon different principles from that of the other pump-points shown in your exhibits?

Ans. I did not calculate it on a different principle; they are calculated on the same principle.

Int. 14. State whether or not Judge J. T. Clark is not now and was not the superintendant of this gas company at the time you put in this point.

Ans. I don't know whether he was then or not; I suppose he is now. C. J. Holliday I supposed had employed me to do the work, though an engineer in the employ of the company at the time. At the time I settled for the work Holliday and Clark were present.

Int. 15. Did you personally superintend the sale and putting in of all the wells shown in your Exhibits A, B, C, and D?

Ans. I did not.

Int. 16. How is it that you are enabled to state in your deposition the depth of each of the wells shown in your exhibits?

Ans. I state it from own knowledge in part, & from the report of my hands.

Int. 17. Do you keep any book or books in which any entries

174 were made at the time these pumps were put in, showing the

depth of the well, the profits derived from the pipe and pumps, and cost of material, & profits from the whole well?

Ans. I usually kept a memorandum book or books at the time, in which I kept a memorandum of the depth of the well, price per foot, and the gross amount; and from these memorandums and my recollection I made these calculations in the exhibits; the calculations as to the cost of material is made on a basis allowing fifty cents per foot for the whole depth of the well, unless from my recollection of the circumstances I knew it to be more or less, then I calculated from my actual knowledge of it. I arrived at the knowledge of the cost of the material averaging fifty cents per foot by making a calculation on a number of wells, but I found it to rather go under fifty cents a foot. I put it at fifty cents a foot to be sure to cover the whole cost of material.

Int. 18. When did you make the calculations shown in your Exhibits A, B, C, and D? State the time as near as you can.

Ans. I think I made them during last winter.

Int. 19. Was it since the beginning of the suit against Smith and Hale?

Ans. It was.

Int. 20. In computing the profits as shown by the exhibits A, B, C, and D, what other elements or profits do you include in your calculations growing out of patents or patent-rights other than the one
175 you claim under of June 11th, 1867?

Ans. None only Green's.

Int. 21. What is the nature of Green's patent you speak of?

(Objected to by plaintiff's counsel for irrelevancy.)

Ans. It is a claim of Green's for making the drive-well.

Int. 22. In making your computation of the profits claimed by you and shown in the exhibits, how much have you included for each well on account of Green's patent in this computation on account of profits?

Ans. I have included five dollars on each well for Green's patent.

Int. 23. Does those exhibits exhibit and show the true statement of all points and wells put in by you between March, 1869, and January 1st, 1873?

Ans. They are, as far as I know.

Int. 24. Did you sell or dispose of any other points during the time above stated?

Ans. None personally, that I recollect of.

Int. 25. Did you authorize any other person to sell well-points, for which you claim to have a patent *for*, between March, 1869, and January 1st, 1873?

Ans. Yes, sir.

Int. 26. How many did you sell and authorize to be sold between March, 1869, and January 1st, 1873, and to whom and by whom?

Ans. I sold about two hundred and sixty, and I authorized my brother to manufacture & sell well-points, but don't know how many he sold or to whom. The names of those to whom I sold are given in the
176 exhibits marked "A," "B," "C," & "D," and those sold by my brother, J. R. Craig, of Lawrence, as before stated, I do not know the number he sold or to whom.

Int. 27. Under what arrangement or contract was J. R. Craig, of Lawrence, manufacturing or selling well-points with or for you?

(Objected to by plaintiff's counsel as being immaterial.)

Ans. I had no arrangement or contract with him; I just gave him the privilege of manufacturing and selling them because he was my brother, & to continue to do so as long as I saw proper to do so.

turing the point, rating the well at $1.50 per foot on account of not having to furnish a pump to complete the well. I did not furnish the pipe or the pump.

Int. 7. What did you furnish in this case for the Topeka Coke & Gas Company? State fully what you did furnish, and what you did.

172 Ans. I furnished my patent well-point & superintended in putting it in.

Int. 8. What did that point cost at the manufactory?

Ans. Two dollars and a quarter.

Int. 9. How long were you engaged superintending putting in this well?

Ans. I think I spent in putting in this well about two half days.

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Ans. Expense in Green's patent on the well; five dollars to clear the title on Green's patent; my services as an experienced hand was worth five dollars per day.

Int. 11. Have you now stated all the labor expended by you of the expenses incurred by you in putting down this well?

Ans. I have to the best of recollection.

Int. 12. You may now state whether or not it is not time that the exhibit made in your Exhibits A, B, C, and D, and attached to this deposition, with reference to the different parties to whom you claimed to have put in pumps from March, 1869, to January 1st, 1873, are not reckoned & calculated, and the figures set opposite each person's named, upon the same principle and mode of calculation as in the case of the Topeka Coke & Gas Company.

Ans. They are, except in the other cases, nearly or quite all of them. I furnished the material myself, but in this case of the Coke and

173 Gas Company, I made the calculation in order to arrive at what the actual loss was. I calculated the same as though it had been an ordinary one, such as I usually done where I furnished all the material and labor. In this case I charged the company with the material and then gave it credit for the same, in order to make *to make* my calculation.

Int. 13. Why did you calculate the profits upon this pump-point upon different principles from that of the other pump-points shown in your exhibits?

Ans. I did not calculate it on a different principle; they are calculated on the same principle.

Int. 14. State whether or not Judge J. T. Clark is not now and was not the superintendant of this gas company at the time you put in this point.

Ans. I don't know whether he was then or not; I suppose he is now. C. J. Holliday I supposed had employed me to do the work, though an engineer in the employ of the company at the time. At the time I settled for the work Holliday and Clark were present.

Int. 15. Did you personally superintend the sale and putting in of all the wells shown in your Exhibits A, B, C, and D?

Ans. I did not.

Int. 16. How is it that you are enabled to state in your deposition the depth of each of the wells shown in your exhibits?

Ans. I state it from own knowledge in part, & from the report of my hands.

Int. 17. Did you keep any book or books in which any entries

174 were made at the time these pumps were put in, showing the

depth of the well, the profits derived from the pipe and pumps, and cost of material, & profits from the whole well?

Ans. I usually kept a memorandum book or books at the time, in which I kept a memorandum of the depth of the well, price per foot, and the gross amount; and from these memorandums and my recollection I made these calculations in the exhibits; the calculations as to the cost of material is made on a basis allowing fifty cents per foot for the whole depth of the well, unless from my recollection of the circumstances I knew it to be more or less, then I calculated from my actual knowledge of it. I arrived at the knowledge of the cost of the material averaging fifty cents per foot by making a calculation on a number of wells, but I found it to rather go under fifty cents a foot. I put it at fifty cents a foot to be sure to cover the whole cost of material.

Int. 18. When did you make the calculations shown in your Exhibits A, B, C, and D? State the time as near as you can.

Ans. I think I made them during last winter.

Int. 19. Was it since the beginning of the suit against Smith and Hale?

Ans. It was.

Int. 20. In computing the profits as shown by the exhibits A, B, C, and D, what other elements or profits do you include in your calculations growing out of patents or patent-rights other than the one
175 you claim under of June 11th, 1867?

Ans. None only Green's.

Int. 21. What is the nature of Green's patent you speak of?

(Objected to by plaintiff's counsel for irrelevancy.)

Ans. It is a claim of Green's for making the drive-well.

Int. 22. In making your computation of the profits claimed by you and shown in the exhibits, how much have you included for each well on account of Green's patent in this computation on account of profits?

Ans. I have included five dollars on each well for Green's patent.

Int. 23. Does those exhibits exhibit and show the true statement of all points and wells put in by you between March, 1869, and January 1st, 1873?

Ans. They are, as far as I know.

Int. 24. Did you sell or dispose of any other points during the time above stated?

Ans. None personally, that I recollect of.

Int. 25. Did you authorize any other person to sell well-points, for which you claim to have a patent *for*, between March, 1869, and January 1st, 1873?

Ans. Yes, sir.

Int. 26. How many did you sell and authorize to be sold between March, 1869, and January 1st, 1873, and to whom and by whom?

Ans. I sold about two hundred and sixty, and I authorized my brother to manufacture & sell well-points, but don't know how many he sold or to whom. The names of those to whom I sold are given in the
176 exhibits marked "A," "B," "C," & "D," and those sold by my brother, J. R. Craig, of Lawrence, as before stated, I do not know the number he sold or to whom.

Int. 27. Under what arrangement or contract was J. R. Craig, of Lawrence, manufacturing or selling well-points with or for you?

(Objected to by plaintiff's counsel as being immaterial.)

Ans. I had no arrangement or contract with him; I just gave him the privilege of manufacturing and selling them because he was my brother, & to continue to do so as long as I saw proper to do so.

Int. 28. How long is it since you and your brother, J. R. Craig, have settled, relative to your transactions growing out of the manufacture and sale of these pump-points?

(Objected to by plaintiff's counsel as being immaterial.)

Ans. We have not had any settlement since the spring of 1869, at which time we separated.

Int. 29. Has your brother, J. R. Craig, been manufacturing and selling those well-points during the year 1873; if yea, to what extent has he been engaged in this business?

Ans. He has, but I do not know to what extent; all he could, I reckon.

Int. 30. Has your father been manufacturing or selling these pump-points at Wichita, Kansas; if so, how long has he been engaged in this business and to what extent?

(Objected to by plaintiff's counsel on account of being immaterial.)

177 Ans. He has, I suppose, all he could; I don't know to what extent he has been engaged in said business for about one year and a half last past.

Int. 31. Don't you know as a matter of fact to what extent your father has been manufacturing and selling these pump-points for the last year and a half?

(Objected to by plaintiff's counsel as being immaterial.)

Ans. I don't know as a matter of fact how many he has manufactured and sold. He has not manufactured any to my knowledge. He told me he had sold about one hundred.

Int. 32. At what price has your father been selling these pump-points in the neighborhood of Wichita during the time he has been engaged in the business?

(Objected to by plaintiff's counsel as being immaterial.)

Ans. I don't know, except he told me that he only got enough profit to pay for the labor and material?

Int. 33. When did he tell you that he only got enough profit to pay for the labor and material?

(Objected to as being immaterial.)

Ans. One or two weeks ago, when I was down there.

Int. 34. Was this the first information you received from your father as to the price he was disposing of these points at?

(Objected to as immaterial.)

Ans. I think not; I was down there in July last, and he told me that he could not get more than four dollars for the points on account of other parties there selling them for that price. He said they had put them down at merely cost in order to run him out. I think he also told

178 me that he had let some of the merchants when be first went there have some points at six dollars apiece on some kind of a compromise he had with them, they agreeing to quit interfering with him in the drive-wells when they disposed of pumps and pipes that they then had on hands.

Int. 35. State to whom it was that your father sold pump-points *to* in Wichita, Kansas.

(Objected to by pl'ff's att'y.)

Ans. I think he named West & Mann; no other party that I recollect.

Int. 36. What business was West & Mann engaged in at the time they got those points?

(Obj. by pl'ff.)

Ans. I think they were engaged in the hardware business.

Int. 37. During the time that your father was engaged in manufactur-

ing or selling these points at Wichita was he doing so under a license from you as the patentee of patent No. 65648, of June 11, 1867?

(Objected to by pl'ff' counsel.)

Ans. No, sir.

Int. 38. You state in answer to 7th interrogatory of your examination-in-chief "that on or about the 20th of March, 1870, you were at D'r Ward's store, at Silver Lake, and had a conversation with him concerning pump-points;" will you please state all the conversation had between you and D'r Ward on that occasion relative to pump-points?

(Objected to by pl'ff's counsel as immaterial.)

Ans. He showed me a circular on the door, and told me they had lots of the points at Smith & Hale's, I think he said at $5.00 apiece,
179 and wanted to know why I did not go for them. I asked him if he got the circulars from Smith & Hale. He told me he did. That they requested him to stick it up, and he done so. That is all I recollect now that he said.

Int. 39. Did you offer to sell D'r Ward on that occasion any wells or well-points?

(Objected to by pl'ff's att'y as being immaterial.)

Ans. I don't recollect whether I did at that time or not.

Int. 40. Who was present at this conversation between yourself and D'r Ward?

(Obj. to by pl'ff.)

Ans. I don't recollect the name of any one present. There was other persons about the store at the time, but I paid no attention to them.

Int. 41. You say in answer to 7' interrogatory that you was met when you offered to sell by the remark that the person to whom you offered to sell could obtain the well-tube and point for five dollars. State who those persons were to whom you offered to sell well-tubes and points and declined to purchase because they said they could get them of Smith & Hale for $5.00.

Ans. I can give you some of the first ones. They became so common in a short time that I did not charge my mind with it. One was Harris Wells. He lives near Silver Lake. His son-in-law; I don't recollect his name. Two of the Walkers. I believe both their names are John. They live near Silver Lake, Cauch & Son, at Silver Lake. One of the Nicrugers, near Silver Lake. I recollect old man Barrett, in North Topeka. I don't think of any others at present.

180 Int. 42. You say in your examination in answer to the 7th interrogatory that Smith & Hale made threats against you, and offered to slap your jaws if you offered to claim that you had a patent on this well-tube. State who was present on any occasion when Smith & Hale, or either of them, threatened to do you any personal violence.

(Obj. to by pl'ff.)

Ans. I don't wish to be understood as saying that Smith & Hale personally to me offered to slap my jaws. I had information to come to me through Nicewanger that they had told him that they would slap my jaws. I think then I went to see Hale after hearing this and about it and other matters, and he appeared to be very angry, but did not make any threats.

Int. 43. What time was it and where was it that you met M'r Hale on this occasion?

Ans. I don't recollect the time certainly, but think it was in 1871, at his store. I don't know any one that was present at the time.

Int. 44. What was the occasion of M'r Hale being angry at that time?

(Obj. to by pl'ff' att'y.)

Ans. To the best of my recollection when I went in I asked him about some things he had said or that I heard he had said in reference, among other things, about his threatening to slap my jaws. He did not deny any of them, and seemed to angry and said I had said or done something, and he wanted to know the reason why I had done so.

Int. 45. Will you please now state all the conversation between yourself and M'r Hale on this occasion? State fully what was said.

181 (Objected to by pl'ff's att'y as immaterial.)

Ans. I don't recollect any more of the conversation than I have stated, except I showed him my patent-letters and notified him to quit selling well-points; he said they would use their pleasure about it; this all I recollect about it.

Int. 46. You say in your direct examination that their frequent and persistent boasting that they, Smith and Hale, would beat you and play you out; what do you mean by this language; to whom did they make these boasts, and whether in your presence or in your absence these threats were made?

(Objt. to by pl'ff's counsel as immaterial.)

Ans. My information in regard to this was derived in the same way and from the same parties as referred to about selling the points.

Int. 47. Then it is not true, is it, as a matter of fact and to your own personal knowledge, that Smith & Hale, or either of them, ever threatened at any time that they would beat you or play you out?

(Objt. to by pl'ff's att'y.)

Ans. I heard it so often that I could not doubt the truth of it; I made the statement from information and not from my personal knowledge, only so far as I learned from their publication; I mean the circular attached to Hale's deposition.

Adjourned until to-morrow morning at 9 o'clock.

Thursday morning, Nov. 6th, 1873, at 9 o'clock a. m., parties met, pursuant to adjournment, and cross-examination Samuel F. Craig resumed:

182 Int. 48. To whom have you given license to manufacture, use, or sell pump-points since the 11th day of June, 1867? State the name and residence of each license'.

(Objected to by pl'ff's counsel as immaterial.)

Ans. I have granted no regular license for the manufacture, sale, and use of pump-points since June 11th, 1867; I have licensed to use pump-points to the parties named in the Exhibits A, B, C, & D; also, the parties named in my brother', J. R. Craig's testimony, *named;* I also took a contract from L. M. Rumsey and Co. to pay me a royalty on the manufacture of my well-points, also to my father and brother to manufacture and sell the same; I also authorized one Alexander, of North Lawrence, Kansas, to sell well-points; also one T. J. R. Flack, who resided in Bourbon County, Kansas, to sell my well-points; also one Sheldon, of Schu'ler County, Missouri, to sell well-points; I also authorized other parties to sell well-points. I don't remember all their names.

Int. 49. Are these all the parties you remember having license to manufacture, sell, or use pump-points?

(Objt. to by pl'ff's att'y.)

Ans. They are all I can think of now.

Int. 50. Did you not authorize one Bitner or Bickner to manufacture or sell well-points?

(Objected to by pl'ff's att'y as immaterial.)

Ans. Yes; I think I did to one Bitner; he resided at Eddyville, Iowa. I authorized him to sell points.

Int. 51. What arrangement did you have with Bitner, of Eddyville, Iowa, whereby he was authorized to sell well-points?

183 (Objected to by pl'ff's att'y as immaterial.)

Ans. I sold him a territorial right in compromising a difficulty we had.

Int. 52. What territorial right did you sell him and upon what terms?

(Objected to by pl'ff's att'y as immaterial.)

Ans. I think it was fifteen counties in Illinois for a half interest in the "Eddyville Times," a paper published in Eddyville, Iowa.

Int. 53. What counties did you dispose of in Illinois to this man?

(Objected to by pl'ff's att'y as immaterial.)

Ans. I don't recollect the names of them; I think they commenced opposite Burlington and ran two counties wide east across the State.

Int. 54. What was the value of the interest you got of this man in the printing-office in consideration of the sale of this territory?

(Objected to by pl'ff's att'y as immaterial.)

Ans. I think it was valued at eight hundred dollars.

Int. 55. What was the value of the whole office at the time you purchased it?

(Objected to by pl'ff's att'y as immaterial.)

Ans. I don't know the real value; it was rated at sixteen hundred ($1,600) dollars.

Int. 56. What arrangement did you have with M'r Alexander, of North Lawrence, Kansas, whereby he was authorized to sell well-points?

(Objected to by pl'ff's att'y as immaterial.)

Ans. I sold him a lease on three counties: Atchison, Doniphan, and Brown Counties, Kansas.

184 Int. 57. What do you mean when you say you sold him a lease; do you mean to say you sold M'r Alexander the territory of those counties?

(Objected to by pl'ff's att'y as immaterial.)

Ans. I mean to say I sold him a right in the territory, not an exclusive right, which amounts to a lease; he acquired the right to sell those well-points to others to use; his right to do so counti' es to the end of my patent.

Int. 58. What consideration did M'r Alexander give you for this right, or agree to give you?

(Objected to by pl'ff's att'y as immaterial.)

Ans. I don't recollect the amount.

Int. 59. Has he ever accounted to you for profits since he acquired the right to those three counties?

(Objected to by pl'ff's counsel as immaterial.)

Ans. I don't know anything about it positive; I understood from him and my brother that he bought his points from my brother in Lawrence.

Int. 60. What arrangement or agreement is existing between you and T. J. R. Flack, of Bourbon County, Kansas, whereby you licensed and authorized him to sell well-points?

(Objected to by plff's att'y as immaterial.)

Ans. The same kind of a transaction as I had with Alexander; I don't recollect exactly what territory he got; I think he had Bourbon, Linn, and Miami Counties; and he had a county or two on the Solomon River; I don't recollect the names.

Int. 61. What arrangement is there existing between you and

185 M'r Flack relative to the manner of accounting or paying for this right?

(Objected to by pl'ff's att'y as immaterial.)

Ans. This right gave him the right to purchase well-points of parties I authorized to manufacture them and to sell them to other parties to use.

Int. 62. What consideration has he paid you or agreed to pay you for this right?

(Objected to by pl'ff's counsel as immaterial.)

Ans. I believe it was nine hundred ($900) dollars that he did pay; he paid it in land—a quarter section; the land is situated in Mound City Township, in Linn County, Kansas.

Int. 63. Who have you authorized to manufacture these points?

(Objected to by pl'ff's att'y as immaterial.)

Ans. I authorized L. M. Rumsey & Co. and J. R. Craig; this is all that I remember of.

Int. 64. What arrangement or agreement is there existing between yourself and M'r Sheldon, of Missouri, whereby he is authorized to sell pump-points?

(Objected to by pl'ff's att'y as immaterial.)

Ans. Just the same as existed between myself and the other two parties above named.

Int. 65. What territory have you sold to M'r Sheldon, and what consideration has he paid you or agreed to pay you for it?

(Objected to by pl'ff's att'y as immaterial.)

Ans. As near as I recollect I sold him Sc'uyler, Cope, *Gerardo*, and I think New Madrid counties. I think I got about eight hundred dollars for them. He paid me part money and part land.

186 Int. 66. To what other persons or parties have you disposed of territory to?

(Objected to as immaterial.)

Ans. There was some other territory sold or leased, but I don't remember to whom.

Int. 67. Are you unable to give any better or further information as to what other territory you have sold or disposed of?

(Objected by pl'ff's att'y as immaterial.)

Ans. I recollect of three counties north of F't Demoin' being disposed of, and also the county Lee and Loisa, in Iowa; the county Loisa was sold to James Fetter; the other counties I don't remember to whom they were sold. And Randolph County, State of Illinois, was sold, but I don't know to whom; this is all that I remember.

Int. 68. What did M'r Fetter pay you or agree to pay you for the territory of the county of Loisa, State of Iowa?

(Objected to by pl'ff's att'y as irrelevant.)

Ans. I can't be certain, but I think it was two hundred and seventy-five ($275) dollars.

Int. 69. What did you receive for the territory of the county of Lee, and State of Iowa, and from whom did you recover your pay?

(Objected to by pl'ff's att'y as irrelevant.)

Ans. I don't recollect the amount I received; whatever I did receive, I received it through Jeff. Lafferty, of Eddyville, Iowa.

Int. 70. In answer to eighth interrogatory-in-chief, you say that the use of your well-tube is worth twelve dollars; upon what principle or by what rule do you compute the value upon these well-tube points?

187 Ans. I don't want to be understood as having said the use of my well-tube was worth only twelve dollars, but that the right to use my improvement in well-tubes is worth twelve dollars. I fix the value of it as being my right to do so on the principle that if I furnish

a well-tube by which on an average there could be some thirty or forty dollars saved in making wells each, I had a right to a portion of that value for myself as a license for the use of my patent.

Int. 71. Is the answer to the last interrogatory the only reason that you chose to give for estimating the value fixed by you on the right to use your well points or tube?

Ans. I could give many other reasons; I will give one. I have demonstrated myself practically that the right of a well-tube is worth that amount, from the fact that I can obtain sufficient in making wells with them to allow that amount for the license; also, sufficient to clear the title on other patents, and for labor and profits on investments, and still have a margin. I would refer to the list of names given in Exhibits A, B, C, & D, heretofore given in by me, to demonstrate the fact in which you may allow on an average twelve dollars for the use of my patent and five dollars for the use of Green's patent, and there will still be between twenty and twenty-five dollars for profits and labor on each well.

Int. 72. Is there any other principle or rule adopted by you by
188 which you arrive at the value of the right to use these well-points?

Ans. I adopted that license in the spring of 1868 from the knowledge I had of the patent, and I have never saw any reason to change my mind about it, though there are a great many instances in which I might realize a great deal more.

Int. 73. You say you have demonstrated the value of the point by personal experience; will you please tell us what that experience has been?

Ans. In the spring of 1868, after determining on that plan of disposing of my patent, I made one trip from Lawrence to Salina, and I got Mathew Maxwell, of Salina; and J. A. Cramer, of Solomon City; and Blatsing Co., of Junction City; George Trout, of Wamego; William Woodruff, of North Topeka; and H. P. Woodward, of Perryville; and the Kansas Pacific Railroad Co., all except the Kansas Pacific R. R., to go into the well-business and to pay me fifteen dollars each for the well tubes or points, which they did from that on to the last part of 1869 or first part of 1870, when I was informed by them that L. M. Rumsey's men would sell them a well-tube at $3.50, which said Rumsey's men claimed to be substantially the same thing as my patent. These same parties also informed me that they could not pay me fifteen dollars when Rumsey was selling the same thing for $3.50. About the same time that I
189 got this information I began to hear of Smith & Hale selling the Rumsey point. I called on M'r Hale to ascertain the facts about their selling these points, and became satisfied from what M'r Hale said that they had sold some, and would continue to do so. I then watched for a case when I would have proof of infringement, in order to bring a suit to try the question, and I only afterwards continued the sale of the well-tubes by putting in wells.

(The defendants object to so much of the foregoing answer as is immaterial, hearsay, and not responsive to the foregoing interrogatory.)

The defendants rest the cross-examination.

Re-examination by the plaintiff:

Int. 1. When did you make those losses to sell well-points to the different persons spoken of in your cross-examination?

Ans. They were all made in the fall & winter of 1867.

SAMUEL F. CRAIG.

I, David Brier, as special commissioner appointed to take evidence in the five cases above named, certify that the evidence of Samuel F. Craig

was taken at the time named in the caption, and was taken in the presence of the complainant and his attorney, Col. Burns, and the attorneys of the defendants, attorneys Mess'rs Guthrie & Brown, and was reduced to writing by myself & Col. Burns, the latter assisting by the express consent of the attorneys of the defendants; and the defendants, after full knowledge of the same, signed their depositions, respectively; and, by consent of the parties the cost of this testimony is equally
190 apportioned in the above five causes.

DAVID BRIER,
Special Commissioner.

Cost of depositions:

Com. fees, 84 folios	$12 60
4 days	20 00
Swearing 2 witnesses	20
Subpœna	25
Certifying depositions	25
	$33 30

Divided equally and taxed in the costs of the five causes.

D. BRIER, *Com.*

(Endorsed:) Testimony of J. R. Craig & S. F. Craig, to be used in five suits.

191		No. of feet.	Price per foot.	Price of well.	Cost of material.	Profit realized.	Loss on well.	R'y price 185 p'r f't.
1	John Neddow	31	175	54 25	15 50	48 75	3 10	57 35
2	Smith	35	1 70	59 50	17 50	42 00	6 25	64 75
3	Meyers	27	1 50	40 50	13 50	27 00	9 45	49 95
4	D. Rodd	35	1 75	61 25	17 50	43 75	3 50	64 75
5	J. R. Lass	27¼	1 60	48 00	13 75	34 25	2 87½	50 87½
6	Simons	27½	1 60	48 00	13 75	34 25	2 87½	50 87½
7	Woodhall	19	1 65	31 35	9 50	20 85	3 80	35 15
8	H. Arbold	36	1 60	58 80	18 00	40 80	9 00	67 80
9	R. W. Manufactory	44	1 75	77 00	22 00	55 00	4 40	81 40
10	Brown	13	1 60	20 80	6 50	14 30	3 25	24 15
11	Geo. Eglesharm	44	1 50	66 00	22 00	44 00	15 40	81 40
12	Union Hotel Co.	26½	1 75	45 93	13 12½	32 81½	2 72½	48 56½
13	Haslet	29	1 50	43 50	14 50	29 00	10 15	53 65
14	W'm Pass	29	1 50	43 50	14 50	29 00	10 15	53 65
15	Foster & Co	55	1 60	88 00	27 50	60 50	24 75	112 75
16	Hanarch	35	1 75	61 25	17 50	43 75	3 50	64 75
17	Copper & Bro	26	1 50	39 00	13 00	26 00	10 10	49 10
197	30½ f't to the	5,961 f't	1 57½	9,373 50	2,980 50	6,393 00	1,654 35	11,027 84 11,922 00 23,844 00
397	30½	11,922	1 57½	1,847 00	5,961 00	12,786 00	3,308 70	22,055 70
		539½ 31 5-9		873 34 51 37½	263 62½ 1550 5-7	603 71½ 35 51½	125 27½ 7 36½	99 86½ 58 70 1-7

(Written on margin:) $5,097.00.

(Written on the back.) From Jan. 1st, 1872, to Jan'y 1st, '73. D.

192		No. of feet.	Price per foot.	Price of well.	Cost of material.	Profit realized.	Loss on well.	R'y price 185 p'r f't.
1	I. M. Klams	25	1 50	37 00	12 50	25 00	9 25	46 25
2	Bisgue Bullory	55	1 50	82 50	27 50	55 00	19 31	101 71
3	John Peasel	30	1 50	45 00	15 00	30 00	10 50	55 50
4	John C. Martin	35	1 70	59 50	17 50	42 00	5 15	64 75
5	Easton & Bertram	38	1 60	60 00	19 00	41 00	10 40	70 40
6	Prebbel	23¾	1 60	37 50	11 37½	26 12½	6 43¾	43 93¾
7	Union Hotel	26½	1 75	45 93	13 12½	32 80½	2 73½	48 56½
8	A. Wilson	31	1 50	46 50	15 50	31 00	11 85	55 35
9	Hopkins	52½	1 60	84 00	26 25	57 75	13 12½	97 12½
10	Farnsworth	36½	1 80	66 00	18 16½	48 87½	1 81½	67 81½
11	David Hower	39¼	1 00	63 60	19 66½	43 93½	7 93½	71 53½
12	David Rock	40¼	1 60	65 20	20 16½	45 03½	10 18¾	75 38¾
13	H. Bryers	27 5-12	1 60	39 93	13 73	26 20	10 79½	50 72½
14	Paters	25	1 60	40 00	12 50	27 50	6 25	46 25
15	King Bridge Co	42	1 75	73 50	21 00	52 50	4 20	77 70
16	Grece Adams	26	1 60	41 60	13 00	28 60	6 50	48 10
17	W'm Curtis	27½	1 60	44 50	13 75	30 75	6 37½	50 87½
18	O. Kensey	33½	1 70	56 10	16 50	39 60	3 95	60 05
19	Burgess	23¼	1 75	41 10	11 75	29 35½	2 37½	43 47½
20	A. Wilson	26	1 75	45 50	13 00	32 50	2 60	48 10
		663½	1 62½	1,075 28	331 62½	733 55½	151 73½	1,227 01½
		33 3-20		53 76 2-5	16 58 1-13	37 67½	7 58 7-15	61 35 1-15

193 *Work done from Jan. 1st, 187½, to Jan. 1st, 1872.*

1871. No. of well.	Name of customer.	No. of feet.	Pr. per foot.	Price of well.	Cost of material.	Profit realized.	Losses.	Price of well at 1 85 p'r f't.
41	T. H. Oliver	24. 00	1 50	36 00	12 00	24 00	8 40	44 40
42	M'r Bolton	25. 00	1 50	37 50	12 50	25 00	8 75	46 25
43	M'r West	25. 00	1 50	37 50	12 50	25 00	8 75	46 25
44	D. M. Delany	16½	1 50	24 75	8 25	16 50	5 17½	30 52½
45	M'r Barrett	24. 00	1 35	32 40	12 00	20 40	12 00	44 40
46	Z. King, p. Wilson	34. 00	1 50	51 00	17 00	34 00	11 90	62 90
47	M'r Graves	18. 00	1 50	27 00	9 00	18 00	6 30	33 30
48	M'r Kafford	24. 00	1 50	36 00	12 00	24 00	8 40	44 40
49	Jacob Cooper	26. 00	1 50	39 00	13 00	26 00	9 10	48 10
50	J. P. Bolton	24. 00	1 50	36 00	12 00	24 00	8 40	44 40
51	Union Hotel Co., p'vate	29. 00	1 50	43 50	14 50	29 00	10 15	53 65
52	M'r J. Herse	26. 00	1 50	39 00	13 00	26 00	9 10	48 10
53	M'r Kolford	26. 00	1 50	39 00	13 00	26 00	9 10	48 10
54	M'r Irwin	24. 00	1 50	36 00	12 00	24 00	8 40	44 40
								at 1 60
55	M'r McKizer	27. 00	1 25	33 75	13 50	20 25	9 45	43 20
56	D'r Hassinger	25. 00	1 50	37 50	12 50	25 00	8 75	46 25
57	George Bennett	25. 00	1 50	37 50	12 50	25 00	8 75	46 25
58	M'r's Carr	25. 00	1 50	37 50	12 50	25 00	8 75	46 25
59	H. W. Davis	28. 00	1 50	42 00	14 00	28 00	9 80	51 80
								1 60
60	M'r's Kempton	27½	1 25	34 37½	13 75	20 62½	9 62½	44 00
20	Drive-wells, gross	503	1 46½	737 27½	251 50	485 67½	179 05	916 32½
20	Drive-wells, average	25¼	1 46½	36 86¼	12 57½	24 29	8 95½	45 81½

194 *Work done from Jan. 1st, 1871, to Jan. 1st, 1872.*

No. of feet.	Name of customer.	No. of feet.	Price p'r foot.	Price of well.	Cost of material.	Profit each well.	Loss on each well.	Am't at 1 85.
21	S. H. Powel	27. 9	1 50	41 62½	13 87½	27 75	9 70	51 33¾
22	Joseph Bilconds	35½	1 60	56 80	17 75	39 05	8 87½	65 67½
23	Aaron McAlley	32	1 60	51 20	16 00	35 20	8 00	59 20
24	Johnathan Pickred	29½	1 60	47 20	14 75	32 45	7 37½	54 57½
25	E. T. James	21	1 50	31 50	10 50	21 00	7 35	38 85
26	Calvin Smith	42	1 60	67 20	21 00	46 20	10 50	77 70
27	M'r Gordon	35½	1 60	56 80	17 75	39 05	8 87½	65 67½
28	J. M. Patch	24	1 50	36 00	12 00	24 00	8 40	44 90
29	Clorly Jeams	37½	1 50	56 62½	18 87½	37 75	13 19¼	69 81¼
30	Charley Mier	45	1 50	67 50	22 50	45 00	15 75	83 25
31	James Brandon	29	1 50	43 50	14 50	29 00	10 15	53 65
32	James Schoolhouse	26	1 60	41 60	13 00	28 60	6 50	48 10
33	David Stumbo	23½	1 50	35 25	11 75	23 50	8 22½	43 47½
34	J. P. Herd	26	1 50	39 00	13 00	26 00	9 10	48 10
35	M'r McDowel	25	1 50	37 50	12 50	25 00	8 75	46 25
36	Dave Hunter	25	1 50	37 50	12 50	25 00	8 75	46 25
37	M. E. Camp-Meeting	25	1 50	37 50	12 50	25 00	8 75	46 25
38	John Brewer	26	1 50	39 00	13 00	26 00	9 10	48 10
39	A. C. Wallis	26½	1 50	39 75	13 25	26 50	9 27½	49 02½
40	M'r Whitney	23¼	1 50	35 25	11 75	23 50	8 22½	43 47½
20	Drive-wells, gross	585½	29¼	898 40	292 85	605 55	184 84¼	1,083 15
20	Drive-wells, average	153¼	29¼	44 92	14 66¼	30 22¼	9 24¼	54 57½

195 *Work done from Jan., 1871, to 1872. Jan 1st.*

No. of well.	Name of customer.	No. of feet.	Price p'r foot.	Am't rec. for well.	Cost of material.	Profit on well.	Loss on well.	At 1. 85 p'r ft.
1	C. A. Bowen	27½	1 50	41 25	13 75	27 50	9 62½	50 87½
2	T. M. James	25½	1 50	38 25	12 75	25 50	8 72½	47 17½
3	M'r Orcutt	24	1 50	36 00	12 00	24 00	8 40	44 40
4	George Elliott	23¼	1 50	35 25	11 75	23 50	8 22½	43 47½
5	S. N. Harper	34½	1 60	55 20	17 25	37 95	8 62½	63 82½
6	John Band	30. 9	1 50	46 00	15 35	30 65	10 75	56 75
7	Goeffed Exebrava	25	1 40	35 00	12 50	22 50	11 25	46 25
8	J. S. Moonse	29. 0	1 50	44 00	14 65	29 35	10 30	54 30
9	John S. Moonse	25	1 50	37 50	12 50	25 00	8 75	46 25
10	John A. Stamer	59	1 50	88 50	29 50	59 00	20 65	109 15
11	T. J. Bradley	54	1 60	87 30	27 00	60 30	13 05	100 35
12	Gustavus Leonard	22	1 50	33 00	11 00	22 00	7 70	40 70
13	A. Ball	22	1 50	33 00	11 00	22 00	7 70	40 70
14	Sires Hickney Boty	36	1 50	54 00	18 00	36 00	12 60	66 60
15	Ralph Young	23½	1 50	35 25	11 75	23 50	8 22½	43 47½
16	Naple B. Cameron	26½	1 60	42 40	13 25	29 15	6 62½	49 02½
17	Indian Reynlw	28	1 50	42 00	14 00	28 00	9 80	51 80
18	C. D. Word	36	1 70	61 20	18 00	43 20	5 40	66 60
19	Foster & Lawaque	29	1 50	43 50	14 50	29 00	10 15	53 65
20	John McGreen	27	1 50	40 50	13 50	27 00	9 45	49 95
20	Drive-wells, gross	608	1 52¾	929 10	304 80	625 10	196 20	1,225 30
20	Drive-wells, average	30⅜	1 52¾	46 45½	15 24	31 25½	9 81	56 26½

196 *Work done from Jan. 1st, 1871, to Jan. 1st, 1872.*

No. of well.	Name of customer.	Depth of well.	Price p'r foot.	Cost of well.	Cost of material.	Profit on well.	Losses on well.	From 1 85.
61	J. B. Quinton	44.00	1 40	62 05	22 16¾	40 13¾	20 00	82 01¾
62	D. M. Adams	25¾	1 50	38 50	12 27¾	25 62½	8 35	46 91¾
63	John Bransken	42.00	85	35 70	21 00	14 70	42 00	77 70
64	A. Peetersee	45.00	1 65	74 25	22 50	51 75	9 00	83 25
65	John Loslee	24.00	1 65	39 60	12 00	27 60	4 80	44 40
66	Cranch & Son	34.00	1 65	56 10	17 00	39 10	6 80	62 70
67	D. M. Adams	27.00	1 50	40 50	13 50	27 00	9 45	49 95
68	A. B. Gilman	41.00	1 60	65 60	20 50	45 10	10 25	75 85
69	Ralph Young	24½	1 5	36 75	12 25	24 50	8 57½	45 32½
70	A. P. Benson	19½	2 00	39 00	19 50	19 50	9 75	48 75 250 2 in Pi.
71	W. L. James	25.00	1 50	37 50	12 50	25 00	8 75	46 25
72	Theodore F. Nole	36½	1 60	58 40	18 25	40 15	9 12½	67 32½
73	John Brewer	27.00	1 50	40 50	13 50	27 00	9 45	49 95
74	E. W. Baker	27.00	1 40	37 80	13 50	24 30	12 15	49 95
75	W. Cock	26.00	1 50	39 00	13 00	26 00	9 10	48 10
76	George Young	45.00	1 60	72 00	22 50	49 50	11 25	83 25
77	Morris & Peck	23½	1 50	35 25	11 75	23 50	8 22½	43 47½
78	Mr Stewart	26.00	1 50	39 00	13 00	26 00	9 10	48 10
79	S. McAdams	32½	1 65	53 62½	16 25	37 37½	6 50	60 12½
80	Geo. Petifirm	27.00	1 50	40 50	13 50	27 00	9 45	49 95
20	Drive-wells, gross	622½	.....	942 00	321 10	620 90	222 10	1,164 30
20	Drive-wells, average	31½	1 51½	47 10½	16 05¾	31 04 3-5	11 10 5-6	58 21½

(Endorsed on back:) C.

197 *Work done from Jan. 1st, 1870, to Jan. 1st, 1871.*

No. of well.	Name of patron.	No. of feet.	Gross am't per foot.	Gross am't of well.	Cost of material.	Profit on each well.	Loss.	Whole am't at 1 85.
61	D'r Gabley	37½	1 60	60 00	18 75	41 25	9 37½	69 37½
62	N. C. Gregg	23	1 60	36 80	11 50	25 30	5 75	42 55
63	Charles Seavy	25	1 50	37 50	12 50	25 00	8 75	46 25
64	T. Wallis Ranter	26½	1 75	46 50	13 25	32 25½	2 62½	49 12½
65	Man assistant H. Burges	24	1 75	42 00	12 00	30 00	24 00	44 40
66	George Bennett	24 10	1 60	39 75	12 40	27 35	6 25	46 00
67	Young Nickenges	25	1 60	40 00	12 50	27 50	6 45	46 45
68	Mr Freeborn	35½	1 60	57 80	17 25	40 55	7 87½	65 67½
69	James Bower	26½	1 75	46 09½	13 16½	29 90	2 62	48 70
70	J. P. Hosa	29	1 60	46 40	14 50	31 90	7 25	53 65
71	J. P. Hurd	43½	1 60	69 60	21 75	47 85	10 87½	80 47½
72	Mr Lavis	35	1 60	56 00	17 50	38 50	8 75	64 75
73	Silver Lake S. H.	35	1 60	56 00	17 50	38 50	8 75	64 75
74	Peter Moose	29	1 60	46 40	14 50	31 90	7 25	53 65
75	Charley Parks	24	1 60	38 40	12 00	26 40	6 00	44 40
76	D. E. Kelse	42	1 50	63 00	21 00	42 00	14 70	77 70
77	T. J. Colman	24	1 50	36 00	12 00	24 00	8 40	44 40
78	James Brandon	32	1 60	51 20	16 00	35 20	8 00	59 20
79	W. J. Loyd	26	1 60	41 60	13 00	28 60	6 50	48 10
80	Baptist Church	25	1 50	37 50	12 50	25 00	8 75	46 25
		592	1 60 1-5	948 80	296 00	652 80	147 32	1,096 12½
		29 11-20		47 44	14 80	32 64	7 36¾	54 80

198 *Work done from Jan. 1st, 1870, to Jan. 1st, 1871.*

No. of well.	Name of patron.	No. of feet.	Pr. per foot.	Price of well.	Cost of material.	Profit on well.	Loss on well.	Price at 1 85.
41	M'r Shay	24	1 60	38 40	12 00	26 40	6 00	44 40
42	M'r Loyd, the painter	27	1 60	43 20	13 50	29 70	6 75	49 95
43	M'r E. C. Parsage	22½	1 60	36 00	11 25	24 65	5 62½	41 62½
44	Thomas McCarty	25 10	1 60	41 50	12 50	29 00	6 25	47 75
45	Doctor Greeno	53½	1 60	85 60	26 75	58 85	13 37½	98 97½
46	M'r Wise	24½	1 60	39 20	12 25	26 95	6 12½	45 32½
47	M'r Close	30	1 60	48 00	15 00	33 00	7 50	55 50
48	Mitchell Lafamboy	33½	1 60	53 60	16 75	36 85	8 37½	61 97½
49	W'm Welden	31	1 60	49 60	15 50	34 10	7 75	57 35
50	W'm Curtis	32½	1 62	52 00	16 25	35 75	8 12½	60 12½
51	Curtis & Wise	26	1 70	44 20	15 60	28 60	6 70	50 90
52	Babcock school-house	33	1 60	52 80	16 50	36 30	8 25	60 92½
53	John Degraff	30	1 60	48 00	15 00	34 00	7 50	55 50
54	Frank Brown	26	1 75	45 50	13 00	32 50	2 60	41 10
55	Rolin Nichols	25	1 75	43 75	12 50	31 00	2 50	46 00
56	P. C. Lyman	30	1 33½	41 00	16 00	18 50	21 00	55 50
57	John Herd	24	1 75	42 00	12 00	30 00	2 40	44 40
58	Medor Bobeau	34	1 50	51 00	17 00	34 00	11 90	62 90
59	M'r Hewlin	42	1 75	73 50	21 00	52 50	4 20	77 70
60	Joseph Oliver	35½	1 60	57 80	17 50	40 30	6 95	64 75
		608½	1 66½	1, 012 31½	304 37½	707 91¼	109 87½	1,122 18½
		30½		50 61 3-16	15 21⅝	35 39½	5 49¼	59 10 15-16

199 *Work done from Jan. 1st, 1870, to Jan. 1st, 1871.*

No. of well.	Name of patron.	No. of feet.	Pr. per foot.	Cost of well.	Cost of material.	Profit.	Loss on well.	At cost at 1 85.
21	Indian Tommy	25	1 60	40 00	12 50	27 50	6 25	46 25
22	Tom. Lazell	42	1 75	73 50	21 00	52 50	4 20	77 70
23	David Easton	48½	1 60	78 00	24 37½	61 62½	8 00	86 00
24	Ben. Holsie	21½	1 60	34 40	10 75	23 65	5 37½	39 77½
25	Soldier Creek man	26	1 60	41 60	13 00	28 60	6 50	48 10
26	Napoleon Shore	23½	1 60	37 60	11 75	25 85	5 87½	43 47½
27	M'r's D'r Caraham	18½	1 60	29 60	9 25	20 35	4 62½	34 22½
28	R. Young	26	1 60	41 60	13 00	28 60	6 50	48 10
29	John Smith	25½	1 60	40 80	12 75	28 05	6 37½	47 17½
30	M'r Howard	25	1 60	40 00	12 50	27 50	6 25	46 25
31	Young Pond Loyd	25	1 60	40 00	12 50	27 50	6 25	46 25
32	John Brewer	28	1 60	44 80	14 00	30 80	7 00	51 80
33	Coldrew, for McReighan	33½	1 60	53 80	16 75	37 05	8 21½	62 11½
34	M'r Willer	25	1 60	40 00	12 50	27 50	6 27	46 25
35	J. H. Pepinger	26	1 60	41 60	13 00	28 60	6 50	48 10
36	John Neiswines	33	1 50	49 50	16 50	33 00	11 55	61 05
37	Archie Abbot	31½	1 60	50 00	15 62½	34 37½	7 81½	57 81½
38	N. P. Wilkins	37½	1 60	59 60	18 62½	40 97½	9 31½	68 91½
39	I. N. Cauley	42	1 60	67 20	21 00	46 20	10 50	77 70
40	M'r Brown	29½	1 60	47 00	14 75	32 45	7 37½	54 57½
		592½	159 6-10	954 77½	296 25	658 52½	141 75	1, 096 52½
		295½		47 73⅝	14 81¼	32 92½	7 08¼	54 82½

(On margin, opposite No. 31:) 50.00.

200 *Work done from Jan. 1st, 1870, to Jan. 1st, 1871.*

1870. No. of well.	Name of patron.	No. of. feet.	Price pr. foot	Price of well.	Cost of material.	Profit.	Loss.	Am't at 1 85, regular price.
1	G. W. McGill	25 6	1 60	40 80	12 75	28 05	6 37½	47 17½
2	J. N. Johnson	47	1 45	68 15	23 50	40 65	18 80	86 95
3	J. P. Bolton	24 10	1 60	39 40	12 40	27 00	6 55	45 95
4	Indian school-house	42½	1 60	68 00	21 25	46 75	10 62½	78 62½
5	Jonathan Pickert	23½	1 60	37 00	11 55	25 45	5 80	42 55
6	Garland Cummings	23½	1 60	37 60	11 75	25 85	5 87½	43 47½
7	Dock Lane	23½	1 60	37 60	11 75	25 85	5 87½	43 47½
8	Irish store-mason	24	1 60	38 40	12 00	26 40	6 00	44 40
9	E. W. Baker	27	1 60	43 20	13 50	29 70	6 75	49 95
10	Mortimer Cook	28½	1 40	39 90	14 23	25 65	12 82½	52 72½
11	Thomas Wallis	26½	1 60	42 00	13 25	28 75	6 40	48 40
12	M'r Paterson	30	1 60	48 00	15 00	33 00	7 50	55 50
13	M'r B. W. Farlin	23½	1 60	37 60	11 75	25 85	5 87½	43 47½
14	John Emerson	23½	1 60	37 60	11 75	25 85	5 87½	43 47½
15	M'r Higby	23½	1 60	37 60	11 75	25 85	5 87½	43 47½
16	J. F. Barney	21½	1 60	34 10	10 75	23 35	5 35	39 45
17	Francis J. Seigel	44½	1 70	75 65	22 25	53 40	6 67½	82 32½
18	J. I. Baveline	52	1 60	83 20	26 00	57 20	13 00	96 20
19	W'm Genner	53	1 60	84 80	26 50	58 30	13 25	98 05
20	Topeka Coke & Gas Co	60	1 50	90 00	32 50	57 50	21 00	111 00
		646½	1 55	1,002 17½	307 00	695 07½	194 32	1,196 39½
		32 13-40		50 10⅝	15 35	34 75¼	9 71¼	59 82

(Endorsed on back:) B.

201 *Work done from March, 1869, to Jan. 1st, 1870.*

No. of well.	Name of patron.	No. of feet.	Am't per foot.	Gross profit.	Cost of material.	Profit on each well.	Remarks.
41	North Topeka school	23	1 85	45 15	11 50	33 65	
42	R. R. Bentsand	44½	1 85	74 15	12 25	51 90	
43	Charles Malinda	49	*1 85	90 65	24 50	66 15	
44	Jacob Cooper	23½	1 75	41 12½	11 75	29 37½	
45	E. W. Baker	32½	1 85	60 12½	16 25	43 87½	
46	M'r Sargent	26½	1 85	49 00	13 25	35 57½	
47	M'r Riper	27 5	1 85	50 87½	13 75	37 12¢	
48	M'r Kellan	19¼	1 85	36 40	6 40	30 00	
49	M'r Phelps	25	1 85	46 25	12 50	33 75	
50	J. D. Dawning	32	1 85	59 20	16 00	43 20	
51	A. C. or Cap. Wallis	13½	1 85	25 00	6 00	19 00	
52	John Smith	23½	1 85	43 47½	11 75	21 70	
53	C. Batchelor & Co	22	1 85	40 70	11 00	29 70	
54	George Petifer	33 5	1 85	61 75	16 75	45 00	
55	B. F. Vanborne	26½	1 75	46 37½	13 25	33 12½	
56	M'r Ward	36 8	1 85	67 85	18 40	49 45	
57	Ben. Pania	13½	1 85	25 00	6 00	19 00	
58	W'm Curtis	13½	1 85	25 00	6 00	19 00	
58	Ely Modon	13½	1 85	25 00	6 00	19 00	
59	Frank Ford	27	1 50	40 50	13 50	27 00	
60	John Degraff	45	1 85	84 00	22 50	61 50	

*10 off.

202 *Work done from March, 1869, to Jan. 1st, 1870.*

No. of well.	Name of patron.	No. of feet.	Price p'r foot.	Gross am't.	Cost of material.	Profit.	Averages.
21	Edward Robenan	43	1 85	79 55	21 50	58 05	Average depth 30 2 in.
22	Alick Neadon	13½	1 85	25 00	6 25	18 75	" price p'r f't 1. 83½.
23	Thomas Moss	30	1 85	55 50	15 00	40 50	" price per well 55. 65.
24	Widow Robeau	36½	1 85	67 50	18 25	49 25	" cost of material. 14. 83.
25	School dist. No. 21	29 9	1 85	55 00	15 00	40 00	" profit p'r well, 40. 80.
26	Man Bryon. Kenedys.	36	1 85	66 60	18 00	48 60	
27	Ben Panise House	38½	1 85	71 25	19 25	52 00	
28	George Petifer	29	1 85	53 65	14 50	39 15	
29	W'm Luzell	34½	1 85	43 50	12 25	31 25	
30	John McGuen	26	1 85	48 10	13 00	35 10	
31	Silver Lake school dist.	30	1 85	55 50	15 00	40 50	
32	W'm Balis	34	1 85	63 00	17 00	46 00	
33	Charley Rameda	33½	1 85	61 50	16 62½	44 87½	
34	Louis Agee	13½	1 85	25 00	7 00	18 00	
35	Osker McCawl	11½	1 85	25 00	25 00	18 50	
36	Joseph Sinille	24 2	1 85	44 65	12 00	32 65	
37	John Curtis	31½	1 85	58 37½	15 75	42 52½	
38	M'r McMillan	40½	1 85	75 92½	20 25	55 67½	
39	M'r Smith John	23	1 85	42 55	11 50	31 05	
40	Joseph Kizer	54	1 85	99 70	26 00	73 90	
	20 wells	602	1 83½	1, 113 00	296 62½	816 32½	

203 *Work done from March 10th, 1869, to Jan. 1st, 1870.*

No. of well.	Name.	F't.	Pr. per f't.	Gross.	Cost of material.	Profit.	Average of 20 wells.
1	J. Cooper	24	1 75	42 00	12 00	30 00	Average profit on each well, 42.53½.
2	H. Wells	25	2 00	50 00	12 50	37 50	Average cost of material, 15.50.
3	Thomas Wales	27	.....	33 90	5 00	28 90	Average am't gross cost of well, 58.03.
4	G. Rigden	25	1 85	46 25	12 75	33 50	Average depth of well, 32 f't.
5	W'm Lafambry	35	1 85	64 75	17 50	47 25	Average price p'r foot, 1.82.
6	W'm Palmer	31 10	1 85	58 85	15 70	43 10	
7	E. Frankel	32	1 85	59 20	16 00	43 20	
8	W'm Joseph	29	1 85	53 65	14 50	39 15	
9	Ben. Paine	50	1 85	92 50	25 00	67 50	
10	G. Petifer	33 8	1 75	61 75	16 85	44 90	
11	Roglen & Sons	29 8	1 85	54 40	15 00	39 90	
12	James White	26½	1 85	49 00	13 25	35 75	
13	Odl. Kelive	25	1 85	46 25	12 50	33 75	
14	J. Haslett	27	1 85	49 95	13 50	36 45	
15	A. Caimon & Co	27	1 85	49 95	13 50	36 45	
16	John Young	42½	1 85	78 62	21 25	57 37	
17	D'r Palmer	43	1 85	79 55	21 50	58 05	
18	Colen Owens	45	1 85	81 40	22 50	58 90	
19	J. C. Wallis	22 9	1 85	42 00	11 75	30 25	
20	J. C. Johnson	37	1 85	68 45	18 50	47 35	
		638	1 82	1, 160 77	310 05	850 72	

(Endorsed:) No. 474. S. F. Craig vs. Smith & Hale. Evidence. Filed Dec. 2, 1873. A. S. Thomas, clerk.

204 *Exceptions to master's report & mo. to recommit.*

And on this day, to wit, Dec. 8th, 1873, came the defendants, by their solicitors, and filed in the clerk's office of said court their exceptions to master's report & motion to recommit, which exceptions and motions,

with the endorsements thereon, are in the words and figures following, to wit:

In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG, COMP'T, *vs.* JACOB SMITH AND GEORGE D. HALE, PARTNERS as Smith & Hale, def'ts. } Def'ts' exceptions to master's report. Mo. to recommit.

Come now said defendants and except to the report of the special master in said cause, for the following reasons, to wit:

Said master, in the taking of testimony and in the scope of his findings & conclusions in the premises, exceeded the authority conferred upon him by the order of reference.

Said report is vague, indefinite, uncertain, and alternative in its matter, its findings, and its conclusions.

Said report is not sustained by evidence taken thereto, and therewith filed, in its conclusions that the well-points sold by defendants were of a kind which infringed complainant's patent.

Wherefore def'ts move the court for an order recommitting said report to the master for correction and amendment, and that def'ts be
205 given thirty days after the filing of such amended and corrected report within which to file exceptions thereto.

GUTHRIE & BROWN,
Solicitors for Def't.

(Endorsed:) T. No. 181. G. No. 477. Circuit court U. S., dist. of Kansas. Samuel F. Craig, comp't, v. Smith & Hale, def'ts. Exceptions of def't to master's report. Mo. to recommit. Filed Dec. 8, 1873. A. S. Thomas, clerk. Guthrie & Brown, att'ys for def'ts.

Journal entry.

At a term of the circuit court of the United States of America in and for the district of Kansas, begun and held at Topeka, in said district, on Monday, the twenty-fourth day of November, A. D. 1873—present, the Hon. John F. Dillon, judge—the following proceedings amongst others were had, & appear of record in the words and figures following, to wit:

WEDNESDAY, *December 3d*, 1873.

SAMUEL F. CRAIG *vs.* SMITH AND HALE. } 447. In equity.

By consent of parties, it is ordered by the court that the interlocutory degree heretofore rendered in this cause be so amended as to allow the complainant to recover the damages sustained by him by reason of the infringement by the defendants of the patent of the complainant. Exceptions to master's report to be filed by Monday next.

206 *Journal entry.*

FRIDAY, *December 12th*, 1873.

SAMUEL F. CRAIG *vs.* SMITH AND HALE. } 477. In equity.

On motion of defendants, by Guthrie & Brown, their solicitors, leave

is granted defendants to present a petition to the circuit judge for a rehearing of this cause within forty days from this date, and it is further ordered by the court that arguments on the exceptions to the master's report filed by the defendants shall be filed by the clerk within fifty days from this date, and the decision of the circuit judge shall be entered as of this term.

207 *Petition of defendants for a rehearing.*

And on this day, to wit, January 21, 1874, came the defendants, by Guthrie & Brown, their solicitors, and filed in the office of the clerk of the circuit court of the United States for the district of Kansas, at Topeka, in said district, their petition for rehearing, which said petition for rehearing, with the endorsements, is in the words and figures following, to wit:

In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG, COMPLAINANT,
vs.
JACOB SMITH AND GEORGE D. HALE, PARTNERS as Smith & Hale, defendants. } In equity.

Petition of for rehearing.

To the honorable the judges of said court:

Come now said defendants, Jacob Smith and George D. Hale, humbly petitioning, and would respectfully show to your honorable court that on the 2d day of February, 1872, said complainant, Samuel F. Craig, filed in this suit his bill of complaint against said defendants, a copy of which said bill of complaint is herewith filed as part hereof, marked "Exhibit A," and reference is hereby made to the same for the purpose of exhibiting the matters of complaint therein set forth; that said defendants, having been served with process therein, appeared to said suit, and, on the 8th day of April, 1872, filed their answer to said bill of complaint, a copy of which said answer is herewith filed as part hereof, marked "Exhibit B," and reference is hereby made to the same for the purpose of exhibiting the matters of defense therein set
208 forth; that on the 23d day of November, 1872, said complainant filed his replication to said answer, a copy of which said replication is herewith filed as part hereof, marked "Exhibit C," and reference is hereby made to the same for the purpose of exhibiting the matters by way of replication therein set forth; that issues in said suit having thus been joined, the same were, on the 3d day of December, 1872, submitted to your honors for hearing, and the said cause was then by your honors taken under advisement upon the proofs therein; that on the 5th day of June, 1873, the opinion of your honorable court in said cause was delivered by his honor Justice Dillon, (a copy of which is herewith filed as Exhibit D,) and a decree was rendered in said cause in favor of said complainant and against the said defendants, upon the issues in said suit joined, a copy of which said decree is herewith filed as part hereof, marked "Exhibit E," and reference is hereby made to the same for the purpose of exhibiting the matters therein decreed; all of which will fully appear, reference being had to the records of said court relating to said suit. And said defendants would further show that, at the November term, 1873, of your honorable court, to wit, on the 12th

day of December, 1873, leave was given by your honorable court to said defendants to present a petition in this behalf for a rehearing, and forty days' time was then and there given within which to prepare the same, as will fully appear, reference being had to the record entry in said suit at said term of your honorable court.

And said defendants, by leave of your honorable court thus had and obtained for this purpose, would now show to your honors that, since the submission, hearing, and decree in this suit as aforesaid, the defendants have discovered evidence of new and substantive facts, which they were not able to discover previously, and which they are advised are, and they believe the same to be, material and pertinent to the issues in said cause, and which newly-discovered evidence is as follows, to wit:

Defendants are informed, and believe it to be true, that prior to the alleged discovery by complainant of his alleged invention relating to well-tubes, substantially the same principle or combination of principles,
209 for alleged infringement of which complainant brings this suit, was invented, discovered, and combined by one Charles Batcheller, of Keene, in the State of New Hampshire, especially the principle of the wire screen or strainer securely fastened to the outside of the well-tube, over the perforations in the tube, combined with the principle of an enlarged drill-head or conical point fixed to the bottom of the well-tube, for which combination letters-patent were issued by the United States to said Batcheller as early as December 12, 1865, a certified copy of which said letters-patent is herewith filed as part hereof, marked "Exhibit F."

Defendants can also prove by the several persons hereinafter named, and defendants believe it to be true, that each of the said several persons at one time or another during the years 1865 and 1866, and prior to the alleged discovery by complainant of his said invention, knew of and used, or saw used by others, or manufactured and used, or saw manufactured and used by others, or knew of and dealt in, throughout various portions of the United States, a tube-well, drive-well, or well-point, the principal features of which consisted of a well-tube having its lower portion or end perforated with slots or holes for the admission of water, which slots or holes were covered by a wire-gauze screen or strainer, which was securely fastened to the outside of said well-tube; also of a conical point fastened to the bottom of said well tube or point, which said conical point was of larger diameter at the base thereof than the diameter of said well tube or point; the names of the said several persons and their places of residence are herewith given, and their respective affidavits to the facts above stated are herewith filed as part hereof, marked as exhibits, and comprising Exhibits G to E E, inclusive, to wit:

Warren J. Chatham, Seneca Falls, N. Y., Exhibit G.
George Cowing, Seneca Falls, N. Y., Exhibit H.
Jacob Vosburg, Seneca Falls, N. Y., Exhibit I.
Benj. J. C. Howe, Syracuse, N. Y., Exhibit J.
David S. Holland, Syracuse, N. Y., Exhibit K.
Spencer D. Richardson, Syracuse, N. Y., Exhibit L.
Thomas S. Hughes, Syracuse, N. Y., Exhibit M.
Elijah B. Torrey, Ithaca, N. Y., Exhibit N.
210 A. J. Edgett, Hornellsville, N. Y., Exhibit O.
Henry Edgett, Hornellsville, N. Y., Exhibit P.
William S. Henry, Hornellsville, N. Y., Exhibit Q.
Garet G. Heirmance, Claverack, N. Y., Exhibit R.

Charles T. Boal, Chicago, Ill., Exhibit S.
Timothy Robertson, Litchfield, Ill., Exhibit T.
C. W. Fillmore, Marengo, Ill., Exhibit U.
William Philip Smith, New Orleans, La, Exhibit V.
Horace L. Hewitt, S't Louis, M'o', Exhibit W.
Perry J. Moore, Kansas City, M'o'. Exhibit X.
Godfrey F. Miller, Leavenworth, Kan., Exhibit Y.
Warren H. Hurd, Sedgwick City, Kan., Exhibit Z.
John M. Bernard, Humboldt, Kan., Exhibit A A.
Alex'r Cameron, Humboldt, Kan., Exhibit B B.
Robert Williams, Humboldt, Kan., Exhibit C C.
Aug. L. Entsminger, Shawnee County, Kan., Exhibit D D.
Jos. C. Wellfelt, N. Topeka, Kan., Exhibit E E.

And defendants have now in their possession the identical well-point put down by said Entsminger and Boyes for said Wellfelt, (see Exhibits D D and E E,) and can produce the same in court.

And defendants further show in this behalf that defendants entered into a general hardware and stove business in Topeka, Kansas, in March, 1869, the entire charge and duties of which, by the terms of said partnership, devolved upon said defendant, George D. Hale; that prior to that time defendants had no knowledge whatever nor information about well-tubes, nor about patents on them; that the sale of pumps and well-tubes was such a small part of their said business that it received but a small share of attention; that the drive-well put down as aforesaid for said Wellfelt (see Exhibits D D & E E) was put down prior to the time said Hale—on whom also the whole charge of defense in said suit rested—came to Kansas; that when this suit was commenced defendants were of the impression, and believed it to be true, that a wire screen securely fastened to the outside of such well-tubes, over the perforations therein, and a conical point attached to the bottom of the tube, having a diameter at the base thereof, larger than the diameter of the well-tube, were
211 old devices, known and used in Michigan, Pennsylvania, New York, New Hampshire, and other States east, long prior to the time of complainant's alleged discovery of his alleged invention, and defendants thereupon employed agents and sought friendly aid to hunt up the facts and supply defendants with information necessary to enable them to present, upon the hearing of this cause, evidence of said facts; that they at once employed an eminent and able counselor and solicitor of your honorable court, the Hon. Archibald L. Williams—whose affidavit in this behalf is herewith filed as part hereof, and marked "Exhibit FF"—to conduct their defense herein, and that he, as defendants verily believe, used all diligence to aid defendants in procuring evidence of such facts to present upon the hearing of said cause; that notwithstanding their and his said efforts, defendants never really obtained any available clue to said facts until long after the hearing of this cause; that it was not until the month of September, 1873, they received information of and the certified copy of the letters-patent herewith submitted, (Exhibit F;) that it was not until after that date they actually ascertained they could prove by said several persons hereinbefore named the facts herewith exhibited as provable by them, (see Exhibits H to EE inclusive;) that since the commencement of said suit, through all such likely sources as they could discover or were informed of, the said defendants have made persistent inquiry and search after facts material and pertinent to the issues in said cause, but owing to the often-uncertain character of their information, the scattered situation of the sources of information, and, withal, the delays and obstacles, not easily sur-

mounted, which were necessarily attendant upon such inquiry and search, they wholly failed to discover any of the evidence herewith exhibited, until long after the submission, hearing, and rendering of the decree in said cause as aforesaid.

Wherefore said defendants would pray your honorable court to order that said decree in said cause, or so much thereof as confirms to said complainant the first invention, discovery, and patent of and for the devices relating to well-tubes, which consist of a wire screen securely fastened to the outside of the well tube or point, over the perforations
212 therein, and the conical point attached to the bottom of the well-tube of diameter larger at its base than the diameter of the well-tube, or a combination of said devices, be annulled and set aside, and that, as to the issues in said cause relating to said devices or a combination of said devices, said cause be reheard by your honorable court, and that leave be given the parties to take testimony upon said issues within such time as the importance of said cause and the difficulty of reaching and obtaining testimony may seem to your honors to require; also that your honorable court make such other and further order as may be necessary to afford defendants that relief which, in the premises, may seem to your honors meet and right.

JACOB SMITH,
GEORGE D. HALE,
Defendants.

JOHN GUTHRIE,
GEO. S. BROWN,
Counsel and Solicitors for Defendants.

UNITED STATES, *District of Kansas, ss:*

Before me, clerk of the circuit court of the United States for said district, now comes George D. Hale, one of the defendants in the foregoing-entitled suit, and in said behalf, upon his oath, says: That he has advised frequently with the solicitors during the preparation of the above and foregoing petition for rehearing, and knows fully the entire contents thereof; that the statements, allegations, and matters of fact therein contained and set forth as within the knowledge of defendants affiant knows to be true, and that the statements, allegations, and matters of fact therein set forth as upon the information and belief of defendants affiant believes them to be true.

GEORGE D. HALE,
One of said Defendants.

Subscribed and sworn to before me this 21st day of January, A. D. 1874.

[L. S.] A. S. THOMAS, *Clerk.*

(Endorsed:) No. 477. U. S. circuit court, district of Kansas. Samuel F. Craig vs. Smith & Hale. Pet'n for rehearing. Filed Jan'y 21, 1874. A. S. Thomas, clerk. Guthrie & Brown, counsel and solicitors for def'ts.

213 *Petition supplimental to defendants' petition for a rehearing.*

And on this day, to wit, January 24, 1874, came the defendants, by Guthrie & Brown, their solicitors, and filed in the office of the clerk of the circuit court of the United States for the district of Kansas, at Topeka, in said district, their supplemental petition to petition for a rehearing, which said supplemental petition, with the endorsements thereon, is in the words and figures, to wit:

In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG, COMPLAINANT,
vs.
JACOB SMITH AND GEORGE D. HALE, PARTNERS as Smith & Hale, defendants. } In equity.

Petition supplemental to defendants' petition for a rehearing.

To the honorable the judges of said court:

Come now said defendants, Jacob Smith and George D. Hale, humbly petitioning your honors, and by way of a petition supplemental to their petition in said cause for a rehearing, beg leave respectfully to show your honors: That the time, to wit, forty days, allowed them by your honors at the November term, 1873, of your court, to wit, on the 12th day of December, 1873, within which to prepare and present a petition for a rehearing in said cause, expired on the 21st day of January, 1874; that since said leave was granted them as aforesaid defendants procured duly-certified copies of certain of the records of the Patent-Office of the United States relating to well-tubes, and containing matters of fact and principles of the patent law pertinent to the issue in said case, but said certified copies did not reach the hands of defendants until the next day after the expiration of the time given them within which to present their petition for a rehearing as aforesaid, to wit, not until the 22d day of January, 1874, wherefore the same are not shown in and with their said petition for a rehearing.

And said defendants would now respectfully show to your honors that on the 10th day of July, 1865, one George Mallery, of North Adams, county of Berkshire, State of Massachusetts, filed his petition in said Patent-Office, claiming a patent for the application of a filtering apparatus to the perforations of a pump-tube substantially in principle like the filter or screen alleged by complainant, in his bill of complaint, to be secured to him by his said letters-patent of June 11, 1867, and for alleged infringement of which he prosecutes this suit; which said device, upon due examination thereof, was rejected by the Commissioner of
214 Patents as not patentable: all of which will fully appear, reference being had to the complete record of said case in said Patent-Office, a certified copy of which is herewith filed as part hereof and marked "Exhibit G G."

Defendants would further show that on the 8th day of November, 1865, one Charles Batcheller, of Keene, county of Cheshire, State of New Hampshire, assignor to himself and one Edwin Parks, filed his petition in said Patent-Office, claiming a patent for covering the slotted or perforated portion of the well-tube with wire gauze in a manner substantially in principle like that in which the complainant covers the perforations in his alleged patented well-point, which said claim, after due examination, was, on the 27th day of December, 1865, rejected by the Commissioner of Patents "for want novelty" in the said device; all of which will fully appear, reference being had to the complete record of said case in the Patent-Office, a certified copy of which is herewith filed as part hereof and marked "Exhibit HH."

Defendants would further show that, on the 13th day of March, 1866, one George Dodge, of Kalamazoo, county Kalamazoo, State of Michigan, filed his petition in said Patent Office, claiming a patent for substantially the same principles relating to well-tubes, which complainant alleges in his bill of complaint are secured to him by his said letters-

patent of June 11, 1867, which said claim was upon first and second examination, and upon appeal, rejected by the commissioner of patents as not embracing patentable principles; all of which will fully appear, reference being had to the complete record of said case in said Patent-Office, a certified copy of which is herewith filed as part hereof, marked "Exhibit II."

Defendants would further show that on the 13th day of March, 1866, one Arthur T. Wilder, of Laporte, county of Laporte, State of Indiana, filed his petition in said Patent-Office, and on the 29th day of June, 1866, one Augustus Harrington, of Warsaw, county of Wyoming, State of New York, filed his petition in said Patent-Office, and on the 3d day of April, 1867, one Hiram Knapp and one Warren H. Pease, of Goshen, county of Elkhart, State of Indiana, filed their petition in said Patent-
215 Office, each of whom, (said Knapp and Pease jointly,) severally, in their petitions, claimed a patent for substantially the same principles relating to well-tubes which complainant, in his said bill of complaint, alleges are secured to him by his said letters patent, of June 11, 1867, each of which said claims was, upon due examination, rejected by the Commissioner of Patents as not embracing patentable principles; all of which will fully appear, reference being had to the complete records of said cases in said Patent-Office, certified copies of which are herewith filed as part hereof, marked as exhibits, and comprising Exhibits JJ, KK, and LL.

Defendants further show that on the 8th day of April, 1867, said complainant, Samuel F. Craig, filed in said Patent-Office his petition claiming a patent for "a well-tube provided with a wire-screen or gauze, secured by soldering, at its perforated end;" also, "the enlarged drill-head, having a chamber or space *e* and outlet *c*," being, substantially, the principles which he alleges are secured to him by his letters patent of June 11, 1867, and for alleged infringement of which he prosecutes this suit; which said claim, after due examination, was, on the 23d day of April, 1867, rejected by the Commissioner of Patents as not embracing patentable principles; all of which will more fully appear, reference being had to the complete record of said application in said Patent Office, a certified copy of which is herewith filed as part hereof, marked "Exhibit MM."

Wherefore, said defendants pray your honors to allow this, their petition supplemental to their petition for a rehearing, to be now filed as and made a part of said petition; and defendants would hereby iterate the prayer of said petition, and would also further pray your honorable court to set aside said decree and grant defendants a rehearing in said cause, for manifest error of law therein in this, to wit: said decree adjudges said complainant to be the patentee of the following principles relating to well-tubes, to wit, the screen applied to the perforated part of the well-tube and the enlarged point attached to the bottom of the well-tube; when upon the face of the record in said suit, to wit, upon the patent papers of said complainant, made a part of his bill of complaint, it appears complainant has a patent upon a combination merely.

216 And, as in duty bound, your petitioners, the said defendants, will ever pray, &c.

JACOB SMITH,
GEORGE D. HALE,
Defendants.

JOHN GUTHRIE,
GEO. S. BROWN,
Counsel and Solicitors for Defendants.

UNITED STATES, *District of Kansas, ss:*

Before me, clerk of the circuit court of the United States for said district, comes now George D. Hale, one of the defendants in the foregoing entitled suit, and, in said behalf, upon his oath says: That he knows the contents of the above petition supplemental to defendants' petition for a re-hearing in said cause; that the statements, allegations and matters of fact therein set forth, which are matters within the knowledge of defendants, affiant knows to be true, and that the statements, allegations and matters of fact therein set forth which are matters of information and belief, affiant believes to be true.

GEORGE D. HALE.

Subscribed and sworn to before me, this 24th day of January, A. D. 1874.

[SEAL.] A. S. THOMAS, *Clerk.*

(Endorsed:) No. 477. U. S. circuit court, dis't of Kansas. Samuel F. Craig vs. Smith & Hale. Pet'n supplemental to def'ts' pet'n for a rehearing. Filed Jan'y 24, 1874. A. S. Thomas, clerk. Guthrie & Brown, sol's for def'ts.

217 *Stipulation.*

And on this day, to wit, Feb'y 13, 1874, came the parties, plaintiff and defendant, by their respective solicitors, and filed in the clerk's office of said court their mutual stipulation in said entitled case, which stipulation with the endorsements thereon is in the words and figures following, to wit:

In the circuit court of the United States for the district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE, COPARTNERS as Smith & Hale. } In equity.

Stipulation.

It is hereby agreed that the complainant have until the first day of April next in which to take and file counter-affidavits on the application of the defendants for a rehearing of this cause, and that defendants then have till May 1st, 1874, for such further steps on their part in said behalf as they may be advised are necessary and right in the premises.

ALFRED ENNIS &
C. M. FOSTER,
Att'ys for Comp't.
GUTHRIE & BROWN,
Att'ys for Def'ts.

(Endorsed:) 478. Samuel F. Craig vs. Smith & Hale. Stipulation. Filed Feb'y 13, 1874. A. S. Thomas, clerk.

218 *Answer of complainant to the application of defendants for rehearing & new trial.*

And on this day, to wit, April 27, 1874, came the complainant by his solicitors & filed in the clerk's office of said court his answer to the application of defendants for a rehearing and new trial in said entitled

cause, which answer, with the endorsements thereon, is in the words and figures following, to wit:

In the circuit court of the United States, district of Kansas.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE.

Answer of complainant to the application for a rehearing and new trial in this cause.

The complainant Samuel F. Craig, in reply to the application of defendants Smith & Hale, for a rehearing of this cause, respectfully states and submits:

That the matters stated in the original and amended applications or petitions of said defendants are not true; and that the several affidavits filed by said defendants with their said applications are erroneous, false, and immaterial; and complainant is advised are such as to matter, time, date, and character, as to render the same & every part thereof wholly inadmissible in fact and in law for the purpose of securing or causing this court to grant a rehearing or a new trial in this:—

219 1st. Because the same, each and all of them, and all the matters alleged in said original and amended application are such as existed at and prior to the trial of this cause, and no good and sufficient reason for omission and failure of defendants to put the said matters in issue and proofs before this court on the trial of this cause.

2nd. Because all and singular the matters alleged in said application & affidavits offered in support thereof are but cumulative to and upon the several matters pleaded, and put in proof by defendants on the trial of this cause.

And complainant further replying, states that if the said matter so alleged and proof in support shall for any purpose be deemed material by this honorable court, then the complainant takes issue with the truth thereof, and respectfully submits:

That it is not true that prior to the alleged discovery of his said well-tube, that "the same principle or combination of principles was invented or combined by Charles Batchelor, of Keene, New Hampshire," or any other party or persons whomsoever, or that the same was used or that the same was invented or used as early as December, 1865, or at any other time prior to the invention by complainant, and the issuing to him of his said letters-patent by the Government of the United States.

220 And further denying the said matters and things so alleged, states that each and any of the several persons and affiants referred to in said original and amended application, or any one else during the year 1865 and 1866, or at any other time prior to the invention and letters-patent of the complainant, invented or used, or ever saw the said well-tube and combination of principles so invented and patented to the complainant as decreed by this honorable court.

And complainant further denies that the court in granting the decree sought to be reviewed by defendants, erred or misapprehended either the facts of the case or the law applicable thereto, and denies that the defendants have shown any good or sufficient cause for reviewing the same.

And complainant more specifically denying the matters alleged and offered as facts in the petition and affidavits of said defendants, states

that neither the rejected patent applied for on the 8th of November, 1865, or the patent granted to said Charles Batcheler, on the 12th of December, 1865, was or is either in principle or combination the same or similar to the invention or patent of complainant. That the well-tube applied for by said Charles Bacheler, on the 8th day of November, 1865, was a total failure because of defective and imperfect con-
221 struction, and when attempted to be driven, tore and stripped the wire or gauze off the pipe & was abandoned by the said Batcheler, as is proved by the affidavits of John A. Batcheler, Messrs. Ellis and Lafayette Weeks, each of the city of Keene, New Hampshire, and sworn to the 31st day of March, 1874, made part hereof, marked "Exhibit C No. 1," "C No. 2," and "C No. 3," respectively.

That said Charles Batcheler, after he had failed to perfect and make useful and operative his proposed well-tube, as applied for on the said 8th day of November, 1865, then applied for and obtained a patent for a well-tube to be sunk and made operative, not by drawing, but by boring with the gauze or screen, covered over with a sheath, as will most conclusively appear from the certified record and drawing of said rejected drive well-tube, and granted auger or screw well-tube presented by defendants, and to which complianant invites the particular attention of the court.

And complainant respectfully submits that the demonstrated failure of the said Charles Batcheler's well-tube for drive-wells, and his abandoning the same, and resorting to a screw with a sheath for the wire or gauze-screen, is not a driving well-tube with the wire-screen or gauze securely fastened on the outside, such as was invented and patented to this complainant.

222 That the affidavit of Warren J. Chatham, set forth as Exhibit G, and the affidavit of Godfrey F. Miller, of Leavenworth, Kansas, made Exhibit Y, with defendant's application, are proved to be false and erroneous as to invention and construction, and also as to the date when any drive well-tubes were manufactured, or used at the town of Plymouth, Indiana; that no drive-wells, with screws, were used in said town until the year 1868, and none were ever seen in the store of Dickenson & Co., of said town, previous to the year 1868, as will be seen by the affidavit of Robert M. Morrell, who is a citizen of said town of Plymouth, sworn to on the 21st day of March, 1874, and made Exhibit C No. 4, filed herewith, coupled with the affidavit of complainant marked "C No. 5," filed herewith to expose the erroneous character of the affidavit of said Miller as aforesaid, who refused, when requested, to give complainant his affidavit, stating the particulars of the times and places, when and where he, said Miller, had seen the well-tubes in use, referred to in his said affidavit, & who stated to affiant that the well-tube he meant to refer to in defendant's said Exhibit Y, was one of those that "slipped up in the pipe when driven, and that then the pipe was pulled up so as to uncover the wire gauze or filtering sections," thus showing that his affidavit, as exhibited by defendants, is wholly
223 untrue, and that neither said Miller, or said Chatham, ever saw any such well-tubes used in Plymouth, Indiana, as set forth by defendants, and that the punctured holes referred to as seen in the store of said Dickenson & Co., were but holes drilled in a galvanized pipe, and nothing more.

And complainant also submits that said Chatham is a member of the firm of said Rumsey & Co., of Seneca Falls, New York, and part of the combination trying to destroy and appropriate the patent of complainant as aforesaid.

And complainant further shows and submits that the affidavits of George Cowing and Jacob Vasburge, each of Seneca Falls, New York, and the affidavit of Benj. J. C. Howe, of Syracuse, New York, made part of defendant's application, marked "H," "I," & "J," respectively, are entirely false as to facts and dates. That the said three affidavits were fabricated at the instance of persons not parties to this suit, creating a pretended device antedating the invention of complainant as decreed by this court, and sought to hinge the same upon the alleged patent of said Benj. J. C. Howe, (Exhibit J,) but in so doing, either erroneously or intentionally, but certainly falsely, gave facts that never existed, and antedated over one year the period that was proper for what did occur, that is, the selling of territory by said Howe to one
224 Pratt, and the supplying of any such well-tubes as described in Exhibits H, I, & J, which will be clearly proved to the court by the depositions of George W. Wisner and Samuel G. Hoyt, of Manhattan, Kansas, and sworn to on the 21st day of February, 1874, and made part of this reply, marked "C No. 6," and "C No. 7."

That the affidavit of said Wisner, (C No. 6,) proves that he was the partner of said Pratt, and was the practical man of business in the matter of sinking drive-wells, and that said Howe did not sell the territory of Kansas to said Pratt in the month of June, 1866, as sworn to by him and said Cowing and Vosburge, but that said sale and assignment of territory was made on the 22nd day of May, 1867, about one year later, as will be seen by the original assignment now submitted to the court, bearing the proper signature and seal of the said Howe, which completely overthrows his said affidavit. The affidavit of said Wisner also proves that said Pratt never was engaged in the patent-well business, and never received any of the alleged well-tubes from said Howe till the month of June, 1867, and their attempted use was a complete faliure for reasons stated in said Wisner's affidavit, and three of the said Howe well-tubes, referred to therein as Exhibits B,
225 C, & D, and are now presented for the inspection of this honorable court.

The affidavit of said Hoyt (C. No. 7) sustains the statements made by said Wisner, the former partner of said Pratt, who was recorder of the county of Riley, and recorded the sale of the territory of said Howe to said Pratt, as will be seen by his official endorsement thereon. For the foregoing and other good and sufficient reasons the complainant submits that the affidavit' of said Corning, Vosburg, and Howe have been corrently fabricated to overcome and cause to be modified the decree of this court.

And complainant further submits that the patent and pretended device of said Howe was set up, and relied upon by the defendants on the trial of this cause, and he is advised would not be admissable for the purposes of this motion in any event.

And complainant further submits that the affidavits of David S. Holland and Spencer D. Richardson made Exhibits K and L, in defendant's application for a new trial, or rehearing, wherein they state that they used a well-tube with a wire screen, or gauze fastened thereon, on the premises of M'r's Carhart, who resided and still resides at No. 24 Russel street, in the city of Syracuse, New York, in July and November, 1865, is not true, because said M'r's Carhart never owned or re-
226 sided on said premises, and never had a well of any description sunk thereon, as will be seen by the affidavit of George B. Cook, who is the son-in-law of the said M'r's Carhart, made part of this reply marked "C No. 8." And complainant further shows by the affidavit of

said Cook that said M'r's Carhart does own lots 26 and 28 on Russell street, in Syracuse, New York, and proves by the deposition of M'r's McKay, who owned premises No. 24 till in October, 1865, and by her daughter, Carrie Sandford, who resided with her mother, and by Walter J. Buston who purchased said premises No. 24, from M'r's McKay, and occupied them until 1869, and who previously occupied premises No. 26, owned by M'r's Carhart, that no drive-well of any description was sunk on either of said premises in the year 1865, by said Holland & Richardson, or any one else, but that in the spring of 1868 a drive-well was put down on the premises of said M'r's Carhart which proved a total failure, and was abandoned because it had no means of excluding the sand, and an ordinary well was sunk in its stead. Which said affidavits of said Hanna McKay, Carrie Sanford, Walter J. Buston, and the affidavit of Elizabeth Peck, are made part of this reply marked "C No. 9," "C No. 10," "C No. 11," and "C No. 12."

And complainant further shows and submits that the affidavit
227 of Thomas S. Hughes, marked "Exhibit M," in defendant's application, stating that he put in drive-well tubes with a wire screen or gauze fastened thereon in the village of Baldwinsville, in the year 1865, and at divers other places in the United States, is absolutely untrue, as is proved by the affidavits of C. D. Bronson and H. B. Williams, of the said village of Baldwinsville, made part of this reply, marked "C No. 13" and "C No. 14," sworn to on the 27' day of March, 1874. That both of these witnesses state they saw the well-tubes used by said Hughes, and still have one of the same in their possession. The witness, Bronson, was proprietor of the hotel where said Hughes stopped, and had a drive-well made on his premises, & the witness, Williams, was negotiating for the purchase of the privilege of using said drive-wells, & both examined the device and construction thereof, and state that there was no wire screen or gauze used, and no point larger than the body of the pipe which was a straight pipe with holes perforated in it, there being no screen or gauze fastened on it, and that all of this was done in 1866, and that a year or so later, making it 1867, the well was made on the premises of M'r's Dewit C. Greenfield referred to by said Hughes, and not in 1865 as stated by him in his said affidavit.

And complainant submits that it being shown that since
228 Hughes' affidavit is erroneous and false as to the commencement of his making drive-wells with wire screen or gauze in 1865, at Baldwinsville, New York, and that it was in 1867 when he made the well for said Greenfield, that it is not possible he could have been using the same in other States and localities prior to the time he left New York, and that his whole statement is erroneous as to facts and time, and has been fabricated for the purposes of this motion for a rehearing or new trial.

Complainant refers to the patent of the said Elijah B. Torry, made Exhibit N, with defendant's said application, to show that it is a wholly different thing from that claimed for it by defendants, was a total failure in its attempted use, and is in no respect like the invention and patent of complainant. Complainant has procured for the purpose, and exhibits here, the patent of said Torry, marked "C No. 15," for the better advice of this court.

And complainant submits that the affidavit' of A. J. Edgett, Henry Edgett, & William S. Henry, made part of defendant's application, marked "O," "P," & "Q," respectively, are perverted in their wording from what were the real facts, and are made to exhibit false dates, as will be seen by the counter-affidavits of said parties, made part of this

reply, marked "C No. 16," "C No. 17," and "C No. 18," respect-
229 ively, & which show that it was as late as November or Decem-
ber, 1866, that said parties made use of a screen on a single occa-
sion, if at all, in a hole for a well previously made, and never used, or attempted to use, it afterwards on any occasion, but used the Edgett patent of Feb'y, 1867, which is also referred to as part of this reply, marked "C No. 19," which shows upon its face a wholly different device from that of complainants, and has not succeeded in practical use; but each of said witnesses recognize the great value of complainant's invention and patent for drive-wells.

And complainant further submits that the affidavit of Garrett G. Heinmann, marked "Exhibit R," and made part of defendant's application, is false and erroneous, and an attempt to convert a cistern-pump or well-pump into a drive-well tube, for which it was not intended, and never used or intended to be used for such purposes, which important fact is, by accident or design, omitted from said affidavit. Besides which, the said Heinmann's patent and device was before the court on the trial of this cause, as will be seen by the copy made part of this reply, marked "C No. 20," and is neither newly discovered or material matter.

And complainant further states that the affidavits of Charles T. Boal and C. W. Filmore, marked "Exhibits S and U," and the affidavit
230 of Augustus L. Estinurger and Joseph C. Wellfelt, each made part of defendant's application, are wholly erroneous as to the fact of invention and time of use of any such drive-well tube as these several witnesses attempt to describe, and is absolutely disproved by the affidavits of J. R. Craig, of Lawrence, Ka's; Gustavus C. Buschick, of Chicago, Illinois; R. H. C. Searle, of Topeka, Ka's; John Q. C. Searle, of Cincinnati, Ohio; and James Boyce, of Knob Noster, Missouri, made part of this reply, marked "C No. 21," "C No. 22," "C No. 23," "C No. 23½," and "C No. 24."

The affidavit of said Craig shows that he is the brother of complainant, and was working with complainant at Eddyville, Iowa, in 1866, and that about the month of August or September, 1866, complainant sent to Chicago to Walworth, Buschick & Co., a letter of instructions, with a drawing, to have manufactured a well-tube of the same description as afterwards patented by complainant, which was made as directed, and which was the first well-tube of that description made in Chicago, so far as known, and by which means the idea of such a device was made known at that place. The affidavit of said Buschick, a member of said firm of Walworth, Buschick & Co., proves that he was familiar with the
firm of Austin & Boal, of Chicago, who were engaged in the same
231 business as the said Buschick, and never knew of any drive-wells in Chicago till late in the summer or fall of 1866. The affidavits of said Searles show that said Boal is one of the firm of Austin & Boal, Chicago, and that C. W. Filmore was their agent & runner, and sold to Searles Brothers drive-well tubes in February, 1867, without the enlarged point or wire or gauze screen, and that about May, 1867, first sold to Searle Brothers well-tubes with the enlarged point, & informed Searle Bro's that a screen could be put on, and that they, Austin & Boal, had obtained this information from Iowa or Wisconsin, and the nature of the information was exactly like that sent by Craig Bro's to Walworth, Buschick & Co.; and said Filmore also said that the points so arranged had been so constructed at a blacksmith's shop in Iowa or Wisconsin, (which is also correct, as complainant did have his tubes made at the blacksmith-shop of James Thompson,) and which was the first information about the use of wire screen or gauze which said Searle Bro's had received.

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228 Hughes' affidavit is erroneous and false as to the commencement of his making drive-wells with wire screen or gauze in 1865, at Baldwinsville, New York, and that it was in 1867 when he made the well for said Greenfield, that it is not possible he could have been using the same in other States and localities prior to the time he left New York, and that his whole statement is erroneous as to facts and time, and has been fabricated for the purposes of this motion for a rehearing or new trial.

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230 of Augustus L. Estinurger and Joseph C. Wellfelt, each made part of defendant's application, are wholly erroneous as to the fact of invention and time of use of any such drive-well tube as these several witnesses attempt to describe, and is absolutely disproved by the affidavits of J. R. Craig, of Lawrence, Ka's; Gustavus C. Buschick, of Chicago, Illinois; R. H. C. Searle, of Topeka, Ka's; John Q. C. Searle, of Cincinnati, Ohio; and James Boyce, of Knob Noster, Missouri, made part of this reply, marked "C No. 21," "C No. 22," "C No. 23," "C No. 23½," and "C No. 24."

The affidavit of said Craig shows that he is the brother of complainant, and was working with complainant at Eddyville, Iowa, in 1866, and that about the month of August or September, 1866, complainant sent to Chicago to Walworth, Buschick & Co., a letter of instructions, with a drawing, to have manufactured a well-tube of the same description as afterwards patented by complainant, which was made as directed, and which was the first well-tube of that description made in Chicago, so far as known, and by which means the idea of such a device was made known at that place. The affidavit of said Buschick, a member of said firm of Walworth, Buschick & Co., proves that he was familiar with the
231 firm of Austin & Boal, of Chicago, who were engaged in the same business as the said Buschick, and never knew of any drive-wells in Chicago till late in the summer or fall of 1866. The affidavits of said Searles show that said Boal is one of the firm of Austin & Boal, Chicago, and that C. W. Filmore was their agent & runner, and sold to Searles Brothers drive-well tubes in February, 1867, without the enlarged point or wire or gauze screen, and that about May, 1867, first sold to Searle Brothers well-tubes with the enlarged point, & informed Searle Bro's that a screen could be put on, and that they, Austin & Boal, had obtained this information from Iowa or Wisconsin, and the nature of the information was exactly like that sent by Craig Bro's to Walworth, Buschick & Co.; and said Filmore also said that the points so arranged had been so constructed at a blacksmith's shop in Iowa or Wisconsin, (which is also correct, as complainant did have his tubes made at the blacksmith-shop of James Thompson,) and which was the first information about the use of wire screen or gauze which said Searle Bro's had received.

And said Searles also prove that they sold the well-tubes to A. L. Entsminger, of the firm of Entsminger & Boyce, of Topeka, Ka's, on the 4th day of June, 1867, that being the first sale of a well-tube with a wire-screen or gauze on it ever sold by said firm, and which was put on a well-tube purchased of Austin & Boal through said Filmore,
232 their agent, and which had no screen or gauze on it when received from said firm by said Searle Bro's, and by them sold to said Entsminger & Boyce.

That by the affidavit of said Boyce it is proved that he was one of the firm of Entsminger & Boyce, engaged in sinking drive-wells in Kansas in the year 1867, and was the practical working member of said firm. That it was late as the fall of the year 1867 that said Estminger and Boyce sunk the drive-well on the premises of Joseph C. Wellfelt, and not in the spring of 1866, as erroneously stated in the affidavits of said Entsminger & Wellfelt, which the said Boyce read before giving his deposition, and then testified from the entry on his books, and further stated he took a steer in part payment, and that it was but a short time before cold weather that the work was done. He also states that Searle Bro's put the wire-screen or gauze on the well-tubes used on the premises of said Wellfelt, and that because of the manner of construction of said tubes—it not being designed for the use of a screen in the first place—great trouble was experienced in getting it sunk or made to operate as a well.

That these combined facts show conclusively that the affidavits of said Boal & Filmore and Entsminger and Wellfelt are grossly erroneous
233 as to facts and dates as used in the application of said defendants.

And complainant states that the affidavit of Timothy Robertson, marked "Exhibit T," in defendants' application is absolutely false and erroneous in every respect as to facts and dates. That it was not in the year 1865, as stated in his said affidavit filed by defendants, but in 1867, and that he purchased said well-tubes of L. M. Rumsey & Co., of S't Louis, M'o, and that it was one of those known as the S't John patent, and not otherwise, as shown by the counter affidavit of said Robertson, made part of this reply, marked "C No. 25."

Complainant states that said Robertson stated that L. M. Rumsey called upon him and procured his said erroneous affidavit (Exhibit T) to be used, as he said, in procuring a new trial, and led the witness to believe it was in the year 1865, but the inspection of his "private papers, made the 17th day of February, 1874," showed him that said Rumsey, whose statement he believed, led him into the error he committed as to time.

And complainant further replying states that the affidavit of William Phillip Smith, made part of defendants' application, marked "Exhibit W," is most positively false; that said Smith is a partner of L. M. Rumsey in the getting up of a patent issued June 1st, 1869, intended to supersede and evade the patent of complainant, which is made part of this reply, marked "C No. 26." That said Smith visited the
234 shops of complainant, at Eddyville, Iowa, as the agent of said Rumsey, and there learned the ideas of complainant, and amongst others the drill-point, which is attached to the joint patent of said L. M. Rumsey & W. P. Smith aforesaid, and that said Smith & Rumsey sought to appropriate the well-tube of complainant, & said Smith has at all times been in the confidence of said Rumsey, and as familiar with the pending litigation as said Rumsey himself.

Complainant, in order to ascertain whether said Smith had been sink-

ing well-tubes at Enterprise, Mississippi, addressed the postmaster at that place, as he was not able to spare the means to go in person, and received an answer which he makes a part of this reply from said postmaster, marked "C No. 27," which shows that said Smith is unknown to that community and could not be heard of after careful enquiry. And complainant states that his affidavit is a mere fabrication gotten up by L. M. Rumsey & Co. for the purposes of this motion, and is in all respects false.

And complainant states that as to the affidavit of Horace L. Hewitt, made part of said application marked "Exhibit W," that he made repeated efforts to see said Hewitt in S't Louis and failed to do so, and learned that he spent most of his time at the business place of
235 L. M. Rumsey & Co. That complainant desired to get a further affidavit from said Hewitt explaining more fully when and where he saw the drive-well tubes he speaks of in his said affidavit, filed by defendant, and when complainant could wait no longer, he requested Charles H. Chapin, esq., of S't Louis, to seek an interview with said Hewitt, but who also failed, as will be seen his note of advice to complainant, made part of this reply, marked "C No. 28." That complainant was unable to get any information from said Hewitt, whose affidavit he believes to be fabricated and false.

And complainant also called to see Perry J. Moore, of Kansas City, whose affidavit is filed with defendants' application, marked "X," stating that in February, 1866, he had seen a certain drive-well tube in use, but when shown his affidavit by complainant, said Moore declared that it was erroneous; that he gave his affidavit at the request of L. M. Rumsey & Co., and did not mean to state all it contained, and made many statements utterly at variance with it, which complainant wrote down and desired said Moore to make oath to, which he at first said he would do and afterwards refused. The statements so made by said Moore are set out in complainant's affidavit herewith filed, marked "C No. 29," and states that all the matters therein contained were stated to com-
236 plainant as facts, and that there is no truth in the affidavit, Exhibit X, of said Moore, filed by defendants, and that the same was fabricated for the purposes of this motion at the instance of L. M. Rumsey & Co., of S't Louis, who are the real parties conducting the same.

And complainant states that the affidavit of Warren H. Hurd made part of defendants' application, marked "Exhibit CC," refers to the pretended patent of Charles Batcheler, and is shown by the affidavits of John A. Batcheler, C No. 1, and Moses Ellis, C No. 2, and Lafayette Weeks, C No. 3, to be erroneous and false. And, furthermore, he does not go far enough back, as to date, to effect the rights of complainant.

That as to the affidavits of John M. Bernard, Alexander Cameron, & Robert Williams, made part of defendants' application marked "Exhibits AA, BB, & CC," complainant submits that the well-tubes referred to, if the said witnesses ever saw any in use, were no other than the well-tubes of complainant, if the same were provided with enlarged points and covered with the wire-screen or gauze securely fastened to the outside, as complainant's invention was becoming known and in use as early as August, 1866. That, as shown by complainant's Exhibit C No. 21, it is shown that his invention was exhibited at many
237 places in the State of Iowa during that year. But complainant states that the well-tubes used at Black Earth, Dane County, Wisconsin, by Conklin & Conklin and Williams, as stated by said Bernard, Cameron, & Williams, was not such a well-tube as said Bernard

used since his location in Kansas, and described in their said affidavits, as will be shown by the depositions of A. S. Johnson, marked "C No. 30;" J. L. Stanford, marked "C No. 31;" George D. Thatcher, marked "C No. 32;" E. S. Parker, marked "C No. 33," and William Milner, marked "C No. 34," each and all made part of this reply.

That the depositions of said Johnson, Stanford, Thacher, and Parker prove that the well-tubes used by the two Conklins and Williams in the year 1866, at Black Earth, was a piece of gas-pipe perforated with holes, with no enlarged point and no wire-screen or gauze. These witnesses speak from positive knowledge, and state that these pumps all failed after a period on account of filling up with sand.

The deposition of said Milner proves that he purchased of the defendants' witness, Bernard, (A A.) the right for Douglass County, Ka's, for the use of the patent for well-tubes owned by said Bernard, which was the Suggett patent, and that it had no enlarged point or wire-screen or gauze attached to it, and that none was claimed for said patent, and that Barnard had stated that he had learned the use of the wire-
238 screen or gauze from a party in Iowa, and would save and protect said Milner from all demands for the infringement thereof, and proves that it was the 14th day of December, 1866, when the first well was put in with the screen or gauze attached, at which time said Bernard informed Milner that he had learned of the use of the wire screen or gauze in Iowa.

And complainant submits that this positive and direct testimony of these five witnesses completely overthrows the erroneous statements of the said Bernard, Cameron, and Williams.

And complainant further submits that the defense to this suit has not been and is not being conducted by or at the expense of said Smith & Hale, who are in truth but nominal defendants, while the real resisting defendants are L. M. Rumsey & Co., who are not parties to the record, and who furnish all the means for the defense, and they are backed by "The Pump Manufacturers' Association of the United States," and complainant, in support of this, refers to the suit brought by A. L. Williams, esq., for his fee in defending this suit for said L. M. Rumsey & Co., made part of this reply, marked "C No. 38," and also a copy of a resolution passed by said association assessing a tax of $100.00 on each member and appointing a committee to conduct this litigation & resist the patent of complainant, & that said L. M. Rumsey is a
239 member of said committee appointed to look after the "Craig patent suit," to which said resolution so passed and adopted, among others, the following names and firms appear: "W. & B. Douglass, Corning & Co., Rumsey & Co., Bignall Manufacturing Co., Union Manufacturing Co., the Gould's Manufacturing Co., S. L. Bagnall & Co., Gobble & Co., H. W. Austin & Co., J. J. Walworth & Co., L. M. Rumsey & Co., Bignall Bro's, Harrington & Co., and of which combination the said Warren J. Chatham, one of the affiants of defendants, is constituted attorney; thus showing that complainant's rights are to be assailed and destroyed by a combination of men and firms with an organized capital for the purpose, and that the defendants to this suit are but nominal, and that the real defendants do not appear in the record.

And complainant further supports this part of his reply and his charge of conspiracy by the affidavit of John Chandler, of Coldwater, Michigan, made part of this reply, marked "C, No. 35," and the affidavit of P. L. Mallery, of Winona, Minnesota, marked "C, No. 36," and the affidavit of A. J. Beaky, of S't Mary's, Kansas, marked "C, No. 37," which prove that said Rumsey, or some member of said "Pump Manu

facturers' Association of the United States," are not only taking the affidavits to be used for the purpose of this motion, but have declared their purpose to destroy the right of the complainant. And complainant also makes part of this reply the petition of A. L. Williams,
240 esq., filed in the district court for Shawnee County, made part of this reply, marked "C, No. 38," suing the said L. M. Rumsey & Co. for his counsel-fees for conducting the defense of this suit in the name of Smith & Hale, for L. M. Rumsey & Co., and also the answer of L. M. and Moses Rumsey, filed in the United States circuit court for the eastern district of Missouri in case of S. F. Craig vs. Rumsey, marked "C, No. 39," and complainant now protests against being harassed with litigation by a combination of parties through mere nominal defendants.

And complainant, further replying, states that the rejected case of George Mallery, Exhibit G G, made part of defendant's application, shows upon its face that the well was not to be driven with the point so constructed, and the wire screen or gauze so attached as to complete the well with one driving, but was to be inserted after the well was drilled, and simply to operate as a filter to keep the sand out of the pump; thus seeking to patent a means of merely filtering or straining, which has been in use since the date of the domestic dairy or household, while the complainant invented a combination of principles which, when applied, produce the novel and useful result of constructing a well tube and screen in such manner as, when driven, to produce a complete well, and for which the Government has given him a patent.
241 The Mallery apparatus and all the other rejected cases were before the examining officers of the Government at the time the complainant's device was undergoing the ordeal and test of examination, and the defendant's Exhibit G G, as well as their H H, I I, J J, K K, and L L, each show with what scrutinizing search and care these examinations are made, and the complainant has succeeded because he has combined novelty and utility of great value, and the defendants have no right to impair his rights by exhibiting the failures of others.

The complainant has not been able to follow up all the parties whose affidavits are filed with the defendant's application, because he has not had the means to do so, but he shows that in every instance where he has had the means of reaching the affiants whose statements are used by the defendants that they have made gross mistakes as to facts and dates, and in many cases has shown that improper statements had been drawn from the witnesses by those who procured the affidavits for the defendants of record and their counsel. And complainant further states that many if not all of the parties whose affidavits are presented by defendants are those who are directly or indirectly under the influence of the said "Pump Manufacturers' Association of the United States," while complainant has been compelled, at great labor and expense, to procure his own affidavits from such sources as his means
242 would enable him to reach, and to word and write them himself, as he could not afford to engage counsel for the purpose.

Complainant respectfully submits that no cause for a rehearing or new trial has been shown by the defendants, and prays that the same be denied, with a decree for the costs incurred in behalf of complainant in resisting this application.

SAMUEL F. CRAIG.

STATE OF KANSAS,
County of Shawnee:

Samuel F. Craig, being sworn, states that he is the complainant in the

above case, and has read the foregoing reply to the motion and petition of defendants, and knows the contents thereof: that the matters stated from his own knowledge are true, and that those stated from information he believes to be true.

SAMUEL F. CRAIG.

Subscribed and sworn to before me this 27th day of April, 1874.
[SEAL.] R. E. HELLER,
Notary Public.

(Endorsed:) No. 477. Samuel F. Craig vs. Smith & Hale. Complainant's answer to defendants' petition for rehearing. Filed April 27, 1874. A. S. Thomas, clerk.

243 *Reply of Smith & Hale.*

And on this day, to wit, June 9th, 1874, came Smith & Hale, by their solicitors, & filed in the clerk's office of said court their reply to the answer of S. F. Craig to the petition for rehearing in said entitled case: which reply, with the endorsements thereon, is in the words and figures following, to wit:

In the United States circuit court for the district of Kansas.

JACOB SMITH AND GEORGE D. HALE, PL'FF, }
vs. } In equity.
SAMUEL F. CRAIG, DEF'T. }

The repliants, saving and reserving to themselves now and at all times hereafter any and all manner of benefit and advantage of exception which may be had or taken to the manifold insufficiencies of the defendant's answer, for replication thereunto says that they will ever maintain and prove their declaration to be true, certain, and sufficient in law to be answered unto, and that the said answer of the said defendant is uncertain, untrue, and insufficient to be replied unto by these repliants, and any other matter or thing whatsoever in said answer contained material or effectual in law to be replied unto, and not herein and hereby sufficiently replied unto, confessed or avoided, traversed or denied, is true: all of which matters & things this repliant is and will be
244 ready to aver, maintain, and prove as this honorable court shall direct: and humbly prays as in and by this declaration they have already prayed.

GUTHRIE & BROWN,
Sol's for Plaintiffs.

(Endorsed:) No. 477. Jacob Smith & George D. Hale vs. S. F. Craig. Reply. Filed June 9, 1874. A. S. Thomas, clerk.

Journal entry.

At a term of the circuit court of the United States of America in and for the district of Kansas, begun and held at Leavenworth, in said district, on Monday, the first day of June A. D. 1874—present the Hon. John F. Dillon & the Hon. C. G. Foster, judges—the following proceedings, amongst others, were had, and appear of record in the words & figures following, to wit:

SATURDAY, *June 13th*, 1874.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE, COPARTNERS as Smith and Hale. } 477. In equity.

Now comes the complainant herein, by Alfred Ennis, C. M. Foster, & Ross Burns, his solicitors, and also come the said defendants herein, by Guthrie & Brown, their solicitors, & this cause came on to be further heard at this term, and, being argued by counsel, is now by the court taken under advisement.

245 *Journal entry.*

At a term of the circuit court of the United States of America in and for the district of Kansas, begun and held at Topeka, in said district, *in said district*, on Monday, the twenty-third day of November, A. D. 1874—present the Hon. John F. Dillon & the Hon. C. G. Foster, judges—the following proceedings, amongst others, were had, and appear of record in the words and figures following, to wit:

MONDAY, *November 30th*, 1874.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE. } 477. In equity.

This cause coming to be further heard on a petition of the defendants for a rehearing, and it appearing that the decree had been enrolled before the said petition for a rehearing was filed in this court, it is ordered by the court, the parties consenting, that the petition for rehearing stand as and for a bill of review, and that the answer to said petition stand as an answer to said bill of review, and that the replication stand as a replication to the said answer. It is further ordered by the court, upon the consent of the parties thereto, that the affidavits taken by the parties and filed herein stand and be treated as depositions, and as such be read on the hearing. And the said cause being submit-
246 ted by the parties to the court on the original bill, answer, and replication and the bill of review, answer, and replication thereto, and the proofs, exhibits, drawings exhibited from the Patent-Office, and models filed in this case, as well *as* those used on the original bill, answer, and replication, as those taken and filed with the bill of review, answer, and reply, was taken under advisement.

And it appearing to the court that the foregoing was made at the last June term of this court but not entered of record, it ordered that the foregoing entry be made nunc pro tunc as of the 9 day of June, 1874.

SAMUEL F. CRAIG
vs.
JACOB SMITH AND GEORGE D. HALE. } 477.

This cause having been heard at the June term, 1874, of this court, on the bill, answer, replication, and proofs, and on the bill of review and answer thereto, and replication, depositions, exhibits, models, and proofs, and argued by counsel, it is now at this term decreed that the

said bill of review be sustained and the decree hereto' rendered be and the same is hereby reversed, and the bill of complainant be and the same is hereby dismissed; and it is further ordered that the defendants pay all the costs incurred down to the time of rehearing.

And thereupon the complainant prays an appeal to the
247, 248 Supreme Court of the United States, which is by the court allowed, by consent, without bond.

And it is ordered by the court that the clerk of this court transmit to the Supreme Court of United States the original exhibits, patent-certificates, schedules, drawings, and models on file along with and as a part of the record & transcript in this cause.

And it is further ordered by the court that the printed matter on file be inserted in the record without copying the same.

JOHN F. DILLON.

249 *Judge's opinion.*

UNITED STATES CIRCUIT COURT,
District of Kansas:

S. F. CRAIG
vs.
SMITH & HALE.

FOSTER, J.:

The patent of the plaintiff is for "combination and arrangement of the perforated end of the well-tube, around which the wire screen or gauze is placed, the point secured to the end of the tube forming the chamber and air-passage."

The patent is evidently for a combination of devices, not new in themselves, (except, perhaps, the chamber and air-passage.)

The plaintiff claims the wire screen on the outside of the perforated tube as new, but the several applications for patents made before plaintiff claims his discovery show that that device is not new.

The claim of Cha's Batchelor, filed Nov. 8, 1865, in the Patent-Office, and rejected, embodied this principle of the wire screen, with an enlarged drill-head to protect the screen.

The patent of Batchelor, Park & Sherman of Dec. 12, 1865, had an outside strainer, protected by an outside casing.

The patent of J. C. & M. V. Campbell, Jan. 8, 1866, has the
250 strainer or conical plug or point, and the patentees say they do not claim the plug as new, it having been described in the patent to Ja's Suggett, March 29, 1864.

The application of Geo. Mallory, July 10, 1865, presented a claim for the wire screen on the outside or inside. The application was rejected.

Application of Arthur T. Wilder, Aug. 20, 1866, outside screen or gauze; rejected, being anticipated by Batchelor's patent of Dec. 12, 1865.

The application of Augustus Harrington, June 29, 1866, among other things presents the screen and enlarged drill-head.

The applications of Dodge, and also Knapp & Pease, present claims for similar screens.

These cases abundantly show that the plaintiff's claim of novelty for the screen is not sustained.

The defendants are using a similar device to plaintiff's patent, except the chamber and air-passage in the drill-head.

The plaintiff's patent being for a combination, two questions arise in the case:

1st. If the plaintiff claims for the wire screen and enlarged drill-head without the air-chamber, is his invention new?

2nd. Do the defendants infringe that patent unless they use the whole combination, including air-chamber and passage?

The first question we are compelled to answer in the negative.

The rejected application of Batcheller, Nov. 8, 1865, presented substantially the same combination.

251 The applicant says: "The enlargement or shoe B protecting the strainers from being injured on the descent of the tube."

The application of Harrington, June 29, 1866, also included these devices.

In the application of Wilder, August 20, 1866, the screen was extended on the outside of the tube, from shoulder to shoulder, the lower shoulder being the enlarged drill-head; thus combining the screen and enlarged drill-head.

The application of George Dodge, March 13, 1866, presents the screen and enlarged drill-head.

From these several cases, to say nothing of the affidavits presented on the application for rehearing, we are led to conclude that the combination of these two principles is not new.

On the second point: The plaintiff's claim, as amended on the suggestion of the Commissioners of Patents, is for the combination and arrangement of the several parts of his device. Those several parts are three in number, to wit:

The wire screen, the enlarged drill-head, and the air-passage.

The first two devices being old, in severalty and in combination, can the defendants be charged with infringing plaintiff's patent by making use of these without the air-passage?

Curtis on Patents, section 111 c., says: "The combination must be new itself, and must produce a new and useful result, not due to the separate action of any one of the devices used in combination nor attained thereby, but due to the co-operation or reciprocal action

252 of the combined devices. And in such a case any one may lawfully use any one of the old devices separately or in new combinations, or may use some of them in combination and omit others."

In case of Hill vs. Thompson, Webb's Pat. Cases, 243, the court, (Dallas, J.,) on the subject of combinations, says: "Neither can it be justly said that the use of the separate ingredients, or some of them partially combined, is a use made of the invention in part. * * * Each of the ingredients had before been separately used, and had been used more or less in partial combination."

Again, in Barnett vs. Hill, 1 Mass., 447, (Curtis, sec. 332,) it was held: "When the patent is for the combination alone, it is no infringement to use any of the parts or things which go to make up the combination, provided the combination itself is not used."

In Prouty vs. Ruggles, 16 Peters, 336, the court holds: "The use of any two parts only, or of two combined with a third, which is substantially different in form or in the manner of its arrangements and connection with the others, is therefore not the thing patented. It is not the same combination if it substantially differs from it in any of its parts." (Curtis, 332.)

In a late case, Garrett vs. Sibert, the U. S. Supreme Court, at its October term, 1873, held the same doctrine.

The combination of the outside screen and the enlarged drill-head not

being new or patentable, if the combination of the plaintiff were patentable at all it must have been so by reason of the combination of
253, 254 the air-passage with the other devices, or a combination of the whole, as set forth in the specifications.

If the plaintiff could or should abandon the claim for the chamber and air-passage he has no patentable combination left.

The plaintiff claims that the defendants have made use of an equivalent for his air-chamber and passage; that the enlarged drill-head is of itself an equivalent, as by making a hole larger than the tube it facilitates the drawing up of the same, which was the real purpose of the air-passage.

If this be true it would merely prove that the air-passage was no improvement on the old drill-head, instead of proving that the old drill-head was an equivalent for the air-passage.

On the second question, therefore, we are compelled to hold the negative, and that there is no infringement of plaintiff's patent by the defendant in this cause.

DILLON, circuit judge, concurs.

255 THE UNITED STATES OF AMERICA,
District of Kansas, ss:

I, A. S. Thomas, clerk of the circuit court of the United States for the district of Kansas, do hereby certify the foregoing to be a true, full, and perfect copy from the record of all the proceedings had in said court in the case of Samuel F. Craig, complainant, against Jacob Smith and George D. Hale, defendants, No. 477, in said court, excepting exhibits A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, A A, B B, C C, D D, E E, and F F, to the defendants' petition for rehearing, and exhibits G G, H H, I I, J J, K K, L L, and M M to defendants' supplemental petition for rehearing, and exhibits 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 23½, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39 to complainant's answer to defendants' petition for rehearing, which said original exhibits excepted above, patent-certificates, schedules, drawings, and models on file are herewith transmitted as part of the record and transcript in this cause, as per decree herein.

In testimony whereof I hereunto set my hand and affix the seal of said court, at my office, at Topeka, in said district, this 4th day of May, A. D. 1875.

[SEAL.] A. S. THOMAS, *Clerk.*

(Indorsement on cover:) No. 74. Samuel F. Craig, appellant, vs. Jacob Smith and George D. Hale. Kansas C. C. U. S. Filed 31st May, 1875.

In the Supreme Court of the United States.

OCTOBER TERM, 1877.

SAMUEL F. CRAIG, *Appellant*,
vs.
JACOB SMITH and GEORGE D. HALE. } No. 74.

Appeal from the United States Circuit Court, District of Kansas.

STATEMENT OF THE CASE.

On the 2d day of February, 1872, the appellant filed his bill in the court below to restrain the infringement of Letters-Patent No. 65,648, dated June 11, 1867. On the 5th day of June, 1873, the opinion of the court was delivered by Mr. Justice Dillon, and a decree was rendered in favor of the complainant, upon the issues joined. On the 12th day of December, 1873, leave was given by the said court to the defendants to present a petition for a rehearing. On the21st day of January the defendants filed a petition for a rehearing. It appearing that the decree had been enrolled before the petition for a rehearing was filed, it was ordered by the court that the petition for rehearing stand as and for a bill of review.

The cause was heard at the June term, 1874, on the bill of review and answer thereto, and a decree was rendered sustaining the bill of review.

The appeal is taken by the complainants below.

Assignment of Errors.

The following errors are assigned as to the opinion which was filed with the decree:

1. The court below erred in its construction of the plaintiff's claim.

2. The court below erred in deciding that "if the plaintiff's claims are for the wire screen and enlarged drill-head, without the air chamber," his invention is not new.

3. The court below erred in deciding that there was "no infringement of the plaintiff's patent," "unless they use the whole combination, *including air chamber and passage.*"

4. The court below erred in sustaining the bill of review.

5. The court below erred in dismissing the complainant's bill.

6. The court below erred in accepting the rejected applications of Charles Batchelor, George Mallory, A. T. Wilder, A. Harrington, George Dodge, Knapp and Rease, as evidence of prior invention.

Brief of the Argument

I.

It has been settled by repeated decisions of the circuit courts and by the Supreme Court of the United States that a patent cannot be defeated by prior rejected and abandoned applications for letters-patent.

Brown *vs.* Guild, 23 Wall., 181,

Northwestern Fire Ex. Co. *vs.* Phila. Fire Ex. Co., 6 Official Gazette, No. 2, p. 34.

Lyman Ventilating and Refrigerating Co. *vs.* Lalor, 12 Blatchf., 303.

Lyman Ventilating and Refrigerating Co. *vs.* Newill, Chamberlain *et al.*, O. G., Vol. X, p. 588.

Lyman *vs.* Myers, cited 12 Blatchf., 303.
Lyman Patent R. Co., *vs.* Oswald, cited 12 Blatchf., 303.

II.

As to prior and public use and as to what is required in a prior invention to defeat a patent.

Washburn *vs.* Gould, 3 Story, 122.
Howe *vs.* Underwood, 3 Story.
Cahoon *vs.* Ring, 1 Clifford, 612.
Cox *vs.* Griggs, 2 Fisher, 177.
Carhart *vs.* Root, 2 Clifford, 123.
Parkhurst *vs.* Kinsman, 1 Blatch., 488.
Lewis *vs.* Marling, 1 W. P. C., 493.
Sayles *vs.* N. W. R. R. Co., 4 Fish., 584.
Roberts *vs.* Dickey, 4 Fish., 532.
Gayler *vs.* Wilder, 10 How., 498.
Whiteley *vs.* Swayne, 7 Wallace, 681.
Agawam Co. *vs.* Jordan, 7 Wallace, 583.
Seymour *vs.* Osborne, 11 Wallace, 552.

III.

The matter alleged in the bill of review existed at and prior to the hearing, and might have been produced by the use of reasonable diligence.

Dexter *vs.* Arnold, 5 Mason, 312, 320, 321.
Massie *vs.* Graham, 3 McLain, 11.
Jenkins *vs.* Prewit, 7 Blackf., 329.
Stevens *vs.* Hey, 15 Ohio, 313.
Hughes *vs.* Jones, 2 Md. Ch. Dec., 293.
Robinson *vs.* Sampson, 26 Maine, 11.
Bingham *vs.* Dawson, Jacob, 243.
Livingston *vs.* Hubbs, 3 Johns. Ch., 124.
Rindleton *vs.* Fay, 3 Paige, 204.

Ord *vs.* Noel, 6 Mad., 127.
Young *vs.* Kerghly, 16 Ves., 348.
Wiser *vs.* Blachly, 2 Johns. Ch., 488.
Barrow *vs.* Rhinelander, 3 Johns. Ch., 160.

IV.

There is one stage in the history of an invention to which the law attaches special significance. It is where the author has made such progress in perfecting it as to acquire a right to a patent, of which no one who comes after him can deprive him, unless he forfeits it by his negligence. This period is commonly termed "*the date of the reduction of the invention to practice.*"

The plaintiff conceived the invention June 27, 1866, and reduced it to practice in the most complete and thorough manner known to the law—*i. e.*, by putting the well tube *in actual and successful use for business purposes*, on the 15th of August, 1866. (Printed Record, p. 35, 56.)

V.

The value and utility of the invention of Craig is demonstrated from the fact that he had introduced "Craig's points" by the thousand among his fellow-citizens in the State of Kansas, and was realizing large profits from their sale, up to the time that his invention was pirated by the defendants. (Special Master's Report, printed record, p. 65.)

VI.

The affidavits used to support the petition for a rehearing seem to have been disregarded by the court below; whether on account of their having been collected by the agents of the "Pump Manufacturers' Association of the United States," as alleged in the answer, (see printed record, p. 111,) or because they were deemed unre-

liable, uncertain, insufficient, false, or wanting in positiveness, does not appear from the record.

VII.

The claim of the plaintiff may be fairly construed, in view of the state of the art disclosed by the record—to be for a driven well-tube, formed by the combination of the three following elements:

1. An *outer* wire screen, or gauze, securely fastened.
2. A perforated *driven* well-tube.
3. A *driven* well-point, the circumference of which *is sufficient to protect the outer screen.* This combination is not anticipated by the patent to J. C. and M. V. Campbell, June 9, 1866, or the patent to C. Batchelor, December 12, 1865, cited in the opinion of the court below.

VIII.

"What would be the legal effect of an actual combination to resist a patent, is a question of much importance.' Woodworth *vs.* Sherman, 3 Story, 172.

CHARLES S WHITMAN,
Of Counsel for Appellant.

Supreme Court of the United States.

October Term, 1877.

SAMUEL F. CRAIG, APPELLANT,
vs.
JACOB SMITH AND GEORGE D. HALE
APPELLEES.

No. 74.

BRIEF OF THE APPELLEES.

At the May term for 1872, in the circuit court of the United States for the district of Kansas, Samuel F. Craig filed his bill for injunction against Jacob Smith and George D. Hale, charging that the said Smith and Hale were and had been infringing upon his rights as a patentee, and praying the court to enjoin them from further infringement. The said Craig claims to be the patentee of an improved well-tube, and in his bill charges that the said Smith and Hale, under the firm-name and style of Smith and Hale, "are now and have been for more than two "years last past, manufacturing, making, using, vending, "and offering to vend to others, to be used throughout the "United States, and especially in the State of Kansas, a "well-tube, which in its main and principal features con- "sists of a well-tube which at one end is perforated, and "having attached to the perforated sides thereof a wire

" screen or gauze to prevent the sand and dust from enter-
" ing the tube through the perforations, together with an
" enlarged point or drill-head, which, when driven through
" the ground, produces a hole larger than the tube thereof,
" thus protecting the said wire screen or gauze from being
" torn off or otherwise injured in sinking the tube, and
" which enables the tube to be withdrawn with ease, if
" necessary; and which said well-tube so manufactured,
" made, used, sold, and offered for sale to others to be
" used by the said defendants, is in its said main and
" principal features identically the same as your orator's
" said invention: reference being had to a diagram or sec-
" tion of the said well-tube so used by said defendants,
" ready here in court to be produced, will more fully and
" at large appear."

To which the appellees answer, and deny that they have in any manner infringed upon the patent of the appellant; but they *have* used a certain well-tube, described in the bill of complaint, which they charge the appellant " was
" not the original and first inventor and discoverer of the
" said invention and discovery, or any material or substan-
" tial part of the theory, or of the principle and combina-
" tion patented in and by the letters-patent mentioned in
" complainant's bill of complaint, but that the same thing
" and the same principle and combination had been previ-
" ously combined by and invented and discovered by one
" J. F. Rabbit, L. M. Rumsey, H. R. and M. I. Watson,
" Byron Mudge, R. H. St. John, Edward Ashdown and
" Geo. P. Gilpin, J. C. & M. V. Campbell, Russell R.
" Lewis, James Luggett, R. F. Osgood, Benj. J. C. Howe,
" Geo. W. Spear, Milton V. Nobles, W. G. Wright, John
" Chandler, R. S. Osgood, J. H. Burm, Orin Pratt, Sher-
" burne & Whipple, Charles C. Cole, Esau I. Taylor &
" William K. Battour, R. J. Hearshey, Cornelius H. Sa-

" tham, John W. Ricker, Henry G. Cady, Oscar C. Fox,
" G. D. Rettingill, A. E. Heberd, who reside in the city of
" St. Louis, in the State of Missouri, and that the same was
" known to and combined by said parties as early as
" A. D. 1865, and prior to the time when it is alleged the
" same was invented and discovered by complainant."

Record, p. 9.

The cause coming on to be heard by the court upon the bill of complaint, answer, and depositions, an injunction was awarded, with an account for damages and profits. (Exhibit D.)

But the then defendants to the bill of complaint having, after the decision of the cause, come into the possession of newly-discovered facts and testimony, mainly documentary, being Exhibits F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, A A, B B, C C, D D, E E, F F, G G, H H, I I, J J, K K, L L, and M M, filed in the court their petition and supplemental petition for rehearing, and also filed the said exhibits as part of their said petitions.

Record, pp. 96, 97, 98, 99, 100, and 101.

But the decree having been enrolled prior to the filing of the said petitions of the then defendants for rehearing, these petitions were, by consent of the parties, treated as a bill of review, and the decision theretofore rendered was reversed upon full consideration, and the bill of injunction dismissed.

Whereupon Craig appealed.

The appellant in this case filed his first application for an alleged invention in the Patent Office on the 8th day of April, 1867, claiming two separate and distinct elements as constituting said invention.

1st. A well-tube provided with a wire screen or gauze,

secured by soldering at its perforated end, substantially as described.

2d. The enlarged drill-head, having a chamber or space "E" and outlet "G," substantially as and for the purpose specified. (Exhibit M M.)

These two claims were rejected April 23, 1867, substantially because the well-tube provided with the wire screen or gauze was not new, and because the enlarged drill-head was neither new in principle or result. (Exhibit M M.)

Upon the suggestion of the Commissioner of Patents the appellant afterwards, on the 1st day of May, 1867, amended *his claim* so as to read as follows:

"The combination and arrangement of the perforated "end 'A' of the well-tube, around which the wire screen "or gauze 'B' is placed; point 'D,' secured to the end "of said tube, forming the chamber E and air-passage "'G,' as herein set forth, for the purpose specified. (Ex-"hibit M M.)"

The patent of the appellant was issued *upon this claim*, which was the *combination* and arrangement of these three several devices, *two* of which the Patent Office had decided were not patentable for want of novelty, and which the office had theretofore frequently refused to patent for that reason. (Exhibits G G, H H, and I I.)

In the bill of complaint in the circuit court, the appellant, Craig, declares that the appellees have infringed his patent, but failed to charge the appellees with having used the third and only original device included in his combination and arrangement, or with having used the combination and arrangement for which, and only for which, he has or had a patent, and having so failed, the use of devices which were declared to be old can, it is submitted, be no infringement on his rights.

It is respectfully urged that this is *another*, and not the

same invention which he, the appellant, charges in his bill that the appellees have infringed.

1st. The devices are wanting in novelty, having been in general use by the public.

Curtis on Patents, p. 82.
Pennock *v.* Dialogue, 2 Pet., 1.
Miller *v.* Silsbee, 4 Mason, 108.
Treadwell *v.* Bladen, 4 Wash., 703.

2d. The use of one of several devices of a combination is no infringement.

Curtis on Patents, 101 *c.*
Prouty *v.* Ruggles, 16 Peters, 336.
Silsby *v.* Foote, 14 How., 219.
McCormick *v.* Talcott, 20 How., 402.
Vance *v.* Campbell, 1 Black, 427.
Eames *v.* Godfrey, 1 Wall., 78.
Brooks *v.* Bicknell, 4 M. L., 30.
Parker *v.* Hayworth, 4 M. L., 370.
Latta *v.* Shank, 1 Fish., 475.
Lee *v.* Blandy, 2 Fish., 39.
Swift *v.* Whison, 3 Fish. Patent Cases, 343.
Crampton *v.* Belknap, *Ibid*, 536.
2 Fish. Patent Cases, 600, Union Sugar Refinery *v.* Mathieson.

THOMAS I. GARDNER,
MATT. H. CARPENTER,
of Counsel for Appellees.